HERMENEUTICAL AND AESTHETIC APPLICATIONS
OF THE THOUGHT OF MICHAEL POLANYI

A dissertation by

CARL PHILLIPS MULLINS

presented to
The Faculty of the
Graduate Theological Union
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

Berkeley, California
April 1, 1976

Committee Signatures:

Wayne R. Rood
Chairperson

Charles A. McCoy

Kenan B. Osborne

Murray

TABLE OF CONTENTS

CHAPTER PAGE

I. GENERAL INTRODUCTION.................................. 1

DIVISION I:
MICHAEL POLANYI'S EPISTEMOLOGICAL PHILOSOPHY

II. POLANYI AND THE PHILOSOPHICAL TRADITION............. 12

- A. Polanyi and His Philosophic Forebears........... 13

III. THE EMERGENCE OF POLANYI'S POST-CRITICAL PERSPECTIVE.................................. 24

- A. Introduction..................................... 24
- B. Philosophic Beginnings........................... 28
- C. The Critique of Objectivism...................... 34
- D. Skills... 40
- E. Articulation..................................... 49
- F. Intellectual Passions............................ 62
- G. Conviviality and Social Order.................... 70
- H. Truth, Commitment and the Fiduciary Structure of Knowledge.......................... 76
- I. The Evolutionary Ontology........................ 94
- J. The Achievement of Personal Knowledge........... 116

IV. THE EXTENSION OF THE POST-CRITICAL PERSPECTIVE...... 130

- A. The Study of Man................................. 130
- B. The Tacit Dimension.............................. 143
- C. Meaning.. 160

V. POLANYI'S PHILOSOPHICAL ACHIEVEMENT: A SUMMARY..... 172

- A. The Evolving Shape of Polanyi's Thought......... 172
- B. The Structure, Object and Medium of Knowing..... 186
- C. Achievements and Limitations of Polanyi's Perspective.......................... 199

XUM

DIVISION II:
INTERPRETATION AS PERSONAL: TOWARDS A POST-CRITICAL HERMENEUTIC

VI. INTERPRETATION: PERSONS AND TEXTS.................. 216

A. General Introduction............................ 216
B. The Interpreter as Actor........................ 222
C. Texts as Sense-Giving Acts and Strategies for Sense-Reading.......................... 236
D. The Text as a Comprehensive Entity Bearing on Reality............................ 253

VII. INTERPRETATION AS SOCIAL AND PERSONAL ACT........... 260

A. The Interpreter as Living, Historical Person.... 260
B. Interpreter and Text............................ 272
C. The Dynamics of Interpretative Communities...... 292

VIII. TRUTH IN INTERPRETATION.......................... 300

A. The Passionate Component of Interpretation...... 300
B. The Temporality of Interpretation and the Problem of History......................... 305
C. Truth as Being-True............................. 313
D. Towards a Person-Centered Hermeneutic: General Summary................................ 316

DIVISION III:
POLANYI'S AESTHETIC THOUGHT

IX. THE STRUCTURE OF ARTIFICIAL COHERENCES............. 338

A. General Introduction............................ 338
B. Two Types of Meaningful Forms: Indicative and Symbolic................................. 341
C. Metaphor and Works of Art....................... 350
D. Summary....... 370

X. POST-CRITICAL AESTHETICS: A CRITICAL EVALUATION.... 377

A. Symbol and Metaphor............................. 377
B. Works of Art.................................... 385
C. General Conclusion.............................. 400

BIBLIOGRAPHY.. 405

XUM

PREFACE

I wish to thank both my wife Judy and my readers, particularly my adviser Dr. Charles McCoy, for the counsel given and forebearance shown during the writing of this document.

C.P.M.

CHAPTER I

GENERAL INTRODUCTION

The Snow Man

One must have a mind of winter
To regard the frost and the boughs
Of the pine-trees crusted with snow;

And have been cold a long time
To behold the junipers shagged with ice,
The spruces rough in the distant glitter

Of the January sun; and not to think
Of any misery in the sound of the wind,
In the sound of a few leaves,

Which is the sound of the land
Full of the same wind
That is blowing in the same bare place

For the listener, who listens in the snow,
And, nothing himself, beholds
The nothing that is not there and the nothing that is.[1]

This quizzical, rich little poem by Wallace Stevens raises a series of intriguing issues. At one level the poet, as in many other poems by Stevens, asks about the nature of human knowing. A "mind of winter" seems necessary to understand the natural world which the snowman is a part of. The poet suggests that man can understand his natural environment only by being a part of it. But the way human beings are a part of the natural order differs from the way other creatures are a part. Human beings relate to and understand their environment through the use of imagination. The "mind of winter" that man has is an imaginative projection of human feelings upon an inanimate snowman. Man can distinguish between the wind itself and the "misery in the sound of the wind." The poet suggests that at least in such obvious cases human beings can recognize their imaginative shaping of meaning. Yet, at the poem's conclusion, Stevens leaves his readers with the question of whether apart from some level of imaginative personification any understanding of the natural order is possible. It is only in being a person employing imaginative powers -- a "nothing himself" -- that distinctions between and judgments about the world and the self are possible. At another level, if the snowman is taken as a symbol for the work of art, Stevens meditates upon the nature of art and the means by which we understand an aesthetic object. An appreciation or understanding of a work begins with the perceiver's full bodily involvement in the world in which the work has its being. A perceiver must imaginatively become the snowman in the snowman's world. The art work is constituted by a complex set of relationships which in a fundamentally affective way, it brings its perceivers into. Affectively dwelling in the world of the work engenders conceptual understanding. An imaginative human reader inevitably does "think" about the "misery in the sound of the wind." Such conceptualization both enriches the aesthetic object and at the same time makes the act of understanding the object somewhat self-conscious. The reader recognizes that it is his imagination that shapes the meaning which he

---

[1] Wallace Stevens, "The Snow Man," in The Pain at the End of the Mind, ed. Holly Stevens (New York: Random House, 1969; Vintage Books, 1972).

XUM

appreciates. Stevens suggests in the last stanza that it is finally the power of the self as an imaginative and sympathetic agent which makes the possibilities of meaning found in the aesthetic object possibilities at all. The listener who listens in the snow is himself no-thing -- he is distinguished from the beauty of the created realm of the artifact and is himself an imaginative, involved creator of meaning.

"The Snow Man," at the levels considered here, is a meditation on the nature of understanding and the nature of aesthetic meaning. Like the poem, this dissertation is an attempt to shape a perspective elucidating both the character of human understanding and aesthetic meaning. As a person interested in and involved with the concerns of both literary criticism and theology, I seek to consider a specific treatment of the problem of knowledge and meaning and show how this perspective can be used in a consideration of problems associated with the meaning of literary art. In its general focus, this study aims at illumining three broad issues: how man discovers and supports the meanings by which he lives in the world; how the literary text becomes meaningful; what the special nature of meaning is in the aesthetic object.

These three issues come together for me and can be fruitfully explored in the context of the philosophical perspective of the modern British philosopher, Michael Polanyi. Polanyi's philosophical thought is an important but largely unrecognized contribution to modern philosophy. His work is regarded as that of a philosopher of science. Polanyi's study of epistemological issues in science has served to develop a more general understanding of man. As I shall show, the successive stages of Polanyi's philosophic career have each added new and broader horizons to the scope of his philosophy. His basic epistemological model becomes the touchstone from which to generate a perspective which includes a Lebensphilosophie, an evolutionary anthropology and an ontology.

Polany's thought is a thorough-going attempt to understand man in terms of both his social and biological or living character; the significance of Polany's perspective, I believe, lies in the novel fashion in which these two elements are brought together in a description of man as a knower. Polanyi calls his philosophy "post-critical"; he means by this that he is articulating an understanding of man which views the person as the shaper and holder of all knowledge. Polanyi strives to portray human knowledge and human beings in a perspective free from certain important epistemological and ontological presuppositions dominant in the philosophical tradition since the time of Descartes and Kant. He tries to work out a functional and logical analysis of the process of knowing. He denies the validity of a number of bifurcations that have been traditional starting points for epistemology. He rejects the Kantian ontological split between phenomenal and noumenal, appearance and thing-in-itself. Knowing and being are brought together within a single realm. He replaces the kind of substantive distinction between self and world used by Descartes with a dynamic functional view of the self as an environmental agent always enselved with his world; like the existential phenomenologists, Polanyi insists that epistemological discussions always begin with an in-the-world subject. Polanyi's particular dynamic way of portraying man's in-the-world being is through his understanding of skills. Skills are the tacit or pre-reflectively known tools by which we appropriate the environment; we have the power to focus consciously or know explicitly because we already have the skills by which we can grasp and bring together an object of interest. Skills include not only physical dexterity but also the whole range of cultural presuppositions and beliefs which is used in a coordinated way in social life. For Polanyi all of these skills make up the tacit dimensions of personhood. They function in the largely second-nature coordinated way in which we use our physical bodies to become capable actors in the world; in a functional sense what is tacit is really what serves as the bodily term of an act of knowing. This highly imaginative conception of skills not only overcomes the chasm between self and world but also minimizes the importance of traditional distinctions between mind and body, thought and action and knowing-what and knowing-how. Every knowing-what is simultaneously a knowing-how because knowing always involves tacit skills; all knowing is active or performative. Acts of knowing can be classified as neither strictly mental nor strictly physical because they involve a range of coordinations and assimilations that are both physiological and cultural. In the same way, thought is not the opposite of action but is a particular type of action since it involves the use of skills. Because Polanyi's thought attempts to portray man as a creature in the evolving cosmos, his work also tends to minimize many substantive distinctions between the human and the non-human realm. Polanyi emphasizes the kinship between the tacit powers of the lowest primeval organism and those of man; he argues that man's enhanced ability to manipulate his environment ensues from the critical knowledge which language gives him.

More than any of the traditional epistemological bifurcations, it is the two-valued, subjective-objective logic in which most epistemological thought is cast that Polanyi seeks to reshape. For Polanyi all knowledge is personal: it is actively shaped and supported by a living person as he stands in a certain historical and social context. Polanyi denies that there is such a thing as self-validating objective knowledge. It is such an objectivist ideal for knowledge which he sees as a misplaced and destructive value in modern life. Polanyi's defense of a personal knowledge is not, however, a defense of subjectivism. He seeks to re-cast the entire framework of discourse in which knowledge is conceived and attempts to re-define the meaning of "subjectivity" and "objectivity" in a way that affirms his understanding of the person as the root of knowledge. Polanyi describes the process of knowing in functional terms. He develops several sets of paired terms (tacit/explicit, subsidiary/focal, proximal/distal, etc.) which point to different logical functions within knowing considered as a whole process or action. Polanyi's epistemology might be called a field theory or Gestalt epistemology; it assumes that neither knowledge nor the process of knowing is altogether formal. Explicit or focal elements of knowledge are produced in the process of integrating a set of tacitly known or bodily coordinated elements which are never critically perceptible in the given act of focusing. A Gestalt is recognized because a background or field is actively employed to project it. Polanyi affirms the convivial and passionate components of knowledge and argues that the veridical aspect of knowing is directly tied to the responsible knower's passionate attempts to fulfill standards self-set and accepted as broadly valid. Within this view Polanyi re-defines "objectivity" in terms of the attempt of the knowing subject to fashion a rational conceptualization which can, because of its harmony and beauty, speak for itself. This understanding he believes recovers the sense which the term originally had in the era of Pythagorean science. What is important about knowledge believed to be objectively true is not that a person is minimally involved in its creation but that such knowledge takes the risk of a generalization which may not be apparent to our ordinary egocentric existence. "Subjective" knowledge for Polanyi is experience passively endured. What Polanyi's work tries to show is that man's possibilities as a knower are not merely subjective but can rise to the challenge of a responsible personal knowledge striving to fulfill universal standards.

Because I believe that Polanyi's philosophical perspective is a particularly significant contribution to modern thought, I believe that it offers important new ways of thinking about hermeneutical and aesthetic problems. This dissertation presents an interpretation of Polanyi's thought and shows how his basic epistemological views can be fruitfully used to conceptualize the nature of meaning in literary art. The structure of the discussion has three central divisions: (1) a discussion of the structure, scope and significance of Polanyi's epistemological thought; (2) an analysis, grounded in a Polanyian context, of the nature of interpretation of the literary text; and (3) a review and critical discussion of Polanyi's late writing on the problem of meaning in art.

The opening section develops my understanding of the shape and scope of Polanyi's thought considered as a whole. Among Polanyi students there is some debate about the way Polanyi's philosophy is to be construed. I accept the responsibility for the point of view presented here. I believe that Polanyi's work needs to be seen in terms of its evolution. My developmental discussion tries to show how a few central ideas are, in the course of Polanyi's life, used to generate an encompassing, coherent understanding of man. I am particularly interested in the epistemology at the center of Polanyi's work; I attempt to analyze and evaluate Polanyi's epistemological model and its ramifications and to contrast his views somewhat with trends in the philosophical tradition. Although the discussion in the opening division has a certain integrity of its own, it is intended here to articulate a general point of view employed in the second and final divisions. It provides a general epistemological perspective within which more specific questions about the interpretation of and meaning in literature are explored.

The second division uses Polanyi's epistemological ideas to develop a coherent, rational description of textual interpretation. I seek to develop a Polanyian hermeneutic for literature; the shape and scope of my discussion of interpretation have been strongly influenced by my interest in and exposure to recent theoretical discussions of interpretation among literary critics. I articulate a perspective which emphasizes that a person is an agent shaping and supporting the meanings he discovers in a text. I seek generally to shift discussion of interpretation from a subjective-objective logic to a platform of discourse which focuses on the interpreter as a living social agent. I examine the nature of interpreter and text in terms of their powers and their social constitution; I discuss the structure of the interaction of person and text; I analyze the horizons within which textual meaning falls.

Following my own application of Polanyi's general perspective to the issues of interpretation of literary art, the final division turns to a consideration of some of Polanyi's own recently published ideas about art. Polanyi's latest book, Meaning,[2] attempts to extend

---

[2] Michael Polanyi and Harry Prosch, Meaning (Chicago: University of Chicago Press, 1975). Future citations employ the abbreviation M and page number only.

XUM

his theory of tacit knowing to describe what he terms the class of "transnatural" meanings found in art, ritual and religion. My discussion examines the logic of this last development in Polanyi's thought and seeks to evaluate and critically expand certain elements of Polanyi's approach to art. Since Polanyi's interests are predominantly epistemological, there is little overlap between the considerations of this final section and the discsussion of interpretation in the third section; the two divisions complement each other and jointly compose what I call the hermeneutical and aesthetic applications of Polanyi's thought.

DIVISION I:

MICHAEL POLANYI'S EPISTEMOLOGICAL PHILOSOPHY

CHAPTER II

POLANYI AND THE PHILOSOPHIC TRADITION

Michael Polanyi's philosophical perspective is rooted in his epistemology. This division bears the title "Epistemological Philosophy" because Polanyi's work presents more than a coherent innovative epistemological model. Yet the more encompassing elements of Polanyi's perspective are intimately tied to and grow out of his understanding of the structure of knowing. In its deepest sense, Polanyi's thought searches for an understanding of man: his achievement merges a Lebensphilosophie, an ontology, and an epistemology. The four chapters of this division attempt to articulate the outline and substance of this achievement as a prelude to a discussion of the hermeneutical and aesthetic applications of Polanyi's ideas. The latter discussions will depend heavily on a comprehensive appreciation of Polanyi's perspective; thus this opening division is a detailed interpretative effort. The present chapter attempts in a brief fashion to place Polanyi's epistemological approach in relation to certain past trends of thought. The third and fourth chapters attempt to portray the growth and shifting development in Polanyi's ideas over the course of his life: ~~the~~ extended discussion in the third chapter treats Polanyi's early work and the central themes of his magnum opus, Personal Knowledge; the fourth chapter rounds out this discussion of

XUM

the complexity and coherence of Polanyi's outlook with an examination of writing after Personal Knowledge. The final chapter of the division, Chapter V, summarizes the core of Polanyi's epistemological stance and reviews critically the broader philosophic perspective which has emerged from this core.

SECTION A:

POLANYI AND HIS PHILOSOPHIC FOREBEARS

The general direction of Polanyi's philosophical work can best be grasped by seeing it against the background of the various epistemological stances in the philosophical tradition. To begin, I shall briefly sketch some of the important ideas about knowing which emerged in the period from Augustine to Kant and suggest in a general way certain trends of thought which Polanyi's perspective draws upon or seeks to change. I emphasize that my remarks on past figures are not comprehensive but are intended only to help orient the reader in placing Polanyi's work in a larger context.[1]

---

[1] A growing body of secondary material treats the relationship between Polanyi's thought and that of other thinkers and traditions. See especially the articles by Grene, Pols, Kuhn, Daly and Ramsey in Intellect and Hope (ed. William H. Poteat and Thomas A. Langford, Durham, N.C.: Duke University Press, 1968), Chapter V, "Historical Perspectives" of Richard L. Gelwick, "Michael Polanyi: Credere Aude His Theory of Knowledge and Its Implications for Christian Theology" (Ph.D. dissertation, Berkeley: Pacific School of Religion, 1965) and Harry Prosch, "Polanyi's Tacit Knowing in the Classic Philosophers," British Society for Phenomenology Journal, v. 4 (1973), pp. 201-16.

XUM

For Saint Augustine the possibilities of human knowledge were tied to man's relationship to God.[2] Augustine has a vivid conception of God in which God's relationship to man, as The Confessions illustrate, was very personal. Augustine conceived this relationship in terms of an intimate link between faith, knowledge, and God. God was seen as a creative active deity who shapes man and the world. The priority of God in the world meant that the world and human affairs could be regarded as signs of God's loving presence.[3] Through faith man could come to understand the world, the arena of divine action, and strive to orient his every commitment toward the omnipresent God. Knowledge or reason, for Augustine was possible only in the context of faith; history and the world as God's signs could be rightly interpreted as pointing ultimately to God only in the context of faith.

---

[2] "It is no small part of knowledge to join thyself to Him who is knowledge. He hath the eyes of knowledge; have thou the eyes of a believing mind. That which God sees, be thou ready to believe." In Ps. XXXVI, Serm. ii, 2. Quoted from Erich Przywara (ed.), An Augstine Synthesis (New York: Harper and Brothers, 1958; Harper Torchbooks), p. 42. Another critic comments: "It is thus this metaphysics of knowledge which begins with God and what God has planted, as it were, within men's minds, that marks the genius of Augustinianism." John B. Harrington, "Augustine's Epistemology," (unpublished paper presented to Pacific Coast Theological Group, April 11-12, 1958), p. 12.

[3] Stanley E. Fish, Self-Consuming Artifacts (Berkeley: U. of California Press, 1972), p. 29ff. Fish's larger discussion of Augustine's rhetoric and its relation to his theology is an excellent treatment of Augustinian semiotics. Augustine's emphasis on the priority of God in the world is aptly summarized in the following statement: "Every good and true Christian should understand that wherever he may find truth, it is his Lord's" (quoted from Fish, 28).

Augustine's epistemological perspective or, more accurately, his view of the interrelation of faith, God, and the possibility of knowledge, is aptly summed up in the famous Augustinian motto credo quaerens intellectum.

In the thirteenth century Saint Thomas established a different conception of human reason;[4] the Augustinian synthesis of faith and knowledge came apart. Thomas, in following Aristotle as his tutor, portrayed man's intellectual powers as self-sufficient for dealing with the natural world. Faith, in his view, concerned man's trust in a revealed structure of divine intention; natural reason, operating apart from faith as its ground and succor, was adequate to understand the world and, in fact, support the revealed conceptions of divine intention held in faith. Thus, in the Thomistic synthesis knowing emerges as a natural activity able to prosper in an available world; the process of knowing and the function of faith belong for Thomas in parallel but separate spheres.

Descartes, in at least some respects, is an heir of Thomas. He wanted to ground human knowledge in a new foundation, a mathematical sense of certainty; like Thomas, Descartes found man, at least as thinking substance, able to establish certain knowledge about the world. The world is intelligible and available to those whose method is correct. Truth can be discovered by those sober rationalists who seek only the clear and distinct idea. For Descartes the wholly attentive intelligence is capable of restoring the fullness of a world held in doubt by proceeding from one clear idea to the next. The method of doubt for which Descartes is famous is no more than the attempt of a mathematician to return to a ground of rational intuition:

---

[4] See F.C. Copleston, Aquinas (Baltimore: Penguin, 1955), pp. 30ff, 49ff, 178ff for a discussion of Thomas' conception of man's natural reason and its connection with other aspects of his thought.

> The _cogito_ is not an argument but an event, the act of a pure and attentive mind, the first, Descartes believes, of a long chain of such acts, all equal in purity, clarity and certainty.[5]

This rational program proposed by Descartes succeeded also in erecting or solidifying certain epistemological distinctions which have remained in the philosophical tradition. The clear and distinct Cartesian intuition is above all a problem-solving conception of the mind;[6] the mind consequently is absolutely distinguished both from the body, with its vague sense perceptions, and the exterior world. The clear idea is not a unit of exterior reality but of problem solving. Thus, in Descartes' thought there emerges a chasm between mind and body and between an isolated knowing self and the external world.

Cartesian rationalism became suspect as the British empiricists gradually developed a new conception of the idea. The possibility of knowledge was seen not as a product of clear and distinct ideas but, increasingly, as a product of sense experience. David Hume carried this empirical bent to its logical conclusion showing that sensory awareness never carries its own interpretation;[7] causality is a mere habit of association, and the validity of all knowledge, insofar as it depends on this principle, ceases to be certain. It remained for Kant, the great mediator between rationalism and empiricism, to put the world back together again.

---

[5] Marjorie Grene, _The Knower and the Known_ (Berkeley: University of California Press, 1966; Campus Books, 1974), p. 72.

[6] Grene, p. 79ff.

Kant stood in awe both of the world of Newtonian science and the free and responsible idea of man inherited from his Lutheran background. He achieved a philosophic synthesis which reconciled these two and answered Hume's probing questions by creating a critical philosophy: he sought to define the structure of man's mind. Of his "critique of pure reason," Kant says

> I do not mean by this a critique of books and systems, but of the faculty of reason in general, in respect of all knowledge after which it may strive *independently of all experience*. It will therefore decide as to the possibility or impossibility of metaphysics in general, and determine its sources, its extent, and its limits -- all in accordance with principles.[8]

Kant asked what reason contributes to knowledge rather than, like Hume, how passive mind could conform to the objects of experience. Knowledge begins with experience but mind synthesizes and unifies experience through its transcendental categories. Objects conform to the operation of mind and not vice-versa. The self is the subject in which mental synthesis occurs; the self is a "transcendental unity of apperception."[9] With this active notion of mind, Kant discovered a way that judgments could be both synthetic and _a priori_. The domains in which such synthetic _a priori_ judgments dominate, namely mathematics, physics and metaphysics, thus were redeemed from the ungrounded position which Hume's critique of knowledge had suggested.

---

[7] Grene, p. 96.

[8] Immanuel Kant, "Preface to First Edition," *Critique of Pure Reason*, trans. Norman Kemp Smith (New York: Humanities Press, 1929), p. 9.

Kant's new approach to the problem of knowledge served both to reaffirm some of Descartes' ontological distinctions as well as to create new bifurcations. The new conception of reason pointed out the circumspect scope of man's knowledge. Knowledge is both limited to the world of experience and by the organizing faculties of mind.[10] There is the phenomenal world, the world of appearance, in which man's quest for knowledge is rooted. This realm is the machine-like world which Newtonian science describes. But there is also the noumenal world, the realm of things-in-themselves known only to God. Although unavailable to man, this realm serves to remind man of the limits of his knowledge. While theoretic reason is adequate for man's study of the phenomenal world, it is the practical reason which provides the single link between the knowing subject and the sphere of things-in-themselves. Man doubles as phenomenal self subject to the laws of nature and as a free noumenal subject not bound by nature. But this freedom is hardly the terrible freedom which later thinkers have envisaged, for man is guided into responsible action by a sense of duty. Just as the transcendental categories of mind make possible universal theoretic judgments about experience, so practical reason is able to determine principles for man's behavior at all times. Morality is an aspect of man's rationality derived _a priori_ by practical reason.

---

[9] Kant, p. 153.

[10] Samuel Enoch Stumpf, _Socrates to Sartre_ (New York: McGraw-Hill Book Co., 1966), p. 314.

The philosophic road from Augustine to Kant[11] was a path with many turns; epistemology changed from a religious problem involving man's relation to a creative, active deity to a problem of the innate structure of mind. To grasp the shape of Polanyi's philosophical perspective, it is important to understand his relationship to his philosophic heritage. Polanyi is aware of the circuitous route the tradition has taken; he understands his own point of departure as an alternative to some of the dilemmas realized in this course. In the most general sense Polanyi's philosophical work might be viewed as an attempt to re-do the work of Kant. His original philosophical problem was similar to that of Kant: Polanyi wanted to understand and accredit the operation of science (though it was not Newtonian science) and show its dependence upon responsible personhood. As with Kant, this project led first to the problem of developing an adequate understanding of human knowing. Kant attempted to ground the estate of reason and unify the spheres of science and morals in his idea of transcendental categories. Polanyi similarly has attempted to develop an active conception of the knower but one which avoids the dogmatic idealization of reason implied in the synthetic _a priori_. Polanyi's description of knowing is in essence more akin to that of Augustine than that of Kant. He attempts to develop an active concept of the knower but one in which the validity of knowledge rests not so much in its universality and necessity as in its believed-in character. Just as Augustine saw that understanding depends on the knower's trust in God, Polanyi posits that knowledge is a product of the knower's involvement in a fiduciary context and his commitment to his own achievements. While Kant was able to ground the problem of knowledge in his conception of a necessary functioning reason, innate because of the structure of human mental faculties, Polanyi has conceived the problem of knowledge as a quite different sort of problem: the problem of knowledge in his view is the problem of justifying the holding of unproven traditional beliefs.[12] Kant, as the culmination of the Cartesian tradition, assumes that reason is to be man's unerring guide and that its potentialities must be explained. Polanyi, on the other hand, approaches the problem of knowledge assuming that human living provides the knower with an important fabric of assumptions and habits of action (i.e., a structure of belief) used in the world; the challenge of epistemology is to show that such unproven beliefs are justified and that they, in fact, provide the ground of any knowledge which, in a Cartesian sense, is thought of as necessary and universal. All of Polanyi's philosophical work thus has been an effort to bridge the gap between what is conventionally considered knowledge or true knowledge and belief or unproven common opinion.

---

[11] There have been, of course, important philosophical innovations since Kant. Many of these developments can be seen as transformations built upon Kant's conception of mind. This brief sketch of the philosophical tradition deals only with figures against which I find it helpful to view Polanyi's work in order to see it in some perspective.

---

[12] Michael Polanyi, "Preface to the Torchbook Edition" (Chicago: University of Chicago Press, 1958; New York: Harper and Row, Harper Torchbook, 1964), ix. Future citations are to the Torchbook edition and use only the abbreviation _PK_ and page number. What Polanyi means with the term "belief" is somewhat complex and emerges in later discussions of skills, articulation and communal life. Polanyi is,

Polanyi refers to his philosophical perspective as "post-critical."[13] Although he never, in short compass, defines this term, it is clear that he has in mind what he understands to be the limitations of both Kantian philosophy and the larger tradition in which it stands. His work argues that knowledge is inevitably tied to a living person who is a skilled agent in the world. In general, he understands the ramifications of this conviction to be antithetical to tendencies seen in the "critical" tradition of philosophy embodied

---

generally stated, suggesting that the patterns of action and valuing and the presuppositions about life held by members of a community provide the bedrock in which what is called "knowledge" is grounded.

[13] Note that the sub-title of PK is "Towards a Post-Critical Philosophy."

in the ideas of such figures as Descartes, Mill, Hume, Kant and the Logical Positivists.[14] One of Polanyi's interpreters gives the following precise formulation of the assumptions of critical philosophy which Polanyi opposes:

> Critical philosophy is the view that one can criticize, analyze, specify, question, doubt or otherwise evaluate comprehensively and _in toto_ the roots and limits of one's conceptual framework, that is, the grounds and scope of one's knowledge, with the intent of indicating clearly and explicitly all the factors which shape that framework or comprise these grounds of knowledge so that all indeterminate, contingent and unspecifiable factors can be ruled out through

---

[14] Polanyi often uses terms such as "critical," "post-critical," and "positivism" in a rather general sense; what he means by such terms emerges in the larger discussion. He has not, to my knowledge, given a short, clear definition of the critical/post-critical pair. I have assumed, because of the high regard Polanyi has for Kant and his "critical philosophy," that he sees Kant as the central figure in a tradition he wants to reshape. Certainly, Descartes, the British Empiricists, and modern developments in philosophy also include important assumptions Polanyi cannot accept. In a little-known address delivered shortly after the publication of _Personal Knowledge_ ("The Outlook of Science: Its Sickness and Cure," a lecture at Austin, Texas, November 1958, typewritten, p. 10), Polanyi did make the following comment about the subtitle to _Personal Knowledge_, "Towards a Post-Critical Philosophy":

> I have given to the book called _Personal Knowledge_ . . . the subtitle "Towards a Post-Critical Philosophy." This was meant to say that in my view the great intellectual revolution which is marked by the names of Descartes, Hume, Kant, J.S. Mill, and Bertrand Russell, is nearing its final limits. This movement was guided by the principle that doubt is the solvent of error which leaves behind truth.

Quoted from Richard Charles Prust, "The Knowledge and Reality of God: The Theological Implications of Michael Polanyi's Epistemology and Ontology" (Ph.D. dissertation, Duke University, 1970), pp. 5-6.

> specification or be transformed into specifiable factors, with the result that one arrives at putatively objective, impersonal certain knowledge.[15]

Polanyi's philosophical work, seen in terms of the larger philosophical tradition, can be viewed as an attempt to transform the emphasis in the philosophic tradition upon an objective impersonal ideal for knowledge. Polanyi aims at inspiring creative knowing which acknowledges its roots in the fabric of skills, assumptions and values held by a person as a participant in a social group. Polanyi's thought is Kantian in that it has an active sense of mind, but post-Kantian in its emphasis upon the person as a living social agent who shapes his knowledge. In its emphasis upon the fiduciary, traditional and personal character of knowing, Polanyi's ideas in some ways resemble the epistemological conceptions of Saint Augustine.[16]

---

[15] Gerald L. Smith, "Tacit Knowing and the Logic of Tradition: A Study in the Thought of Michael Polanyi" (Ph.D. dissertation, Duke University, 1969), p. 24.

[16] See PK, 266-67 for Polanyi's comments on the relationship between his perspective and that of Augustine.

CHAPTER III

THE EMERGENCE OF POLANYI'S POST-CRITICAL PERSPECTIVE

SECTION A:

INTRODUCTION

Kant was a great philosopher and his influence continues to be felt in the twentieth century. I have suggested that Polanyi acknowledges this greatness but contends that the dominant need of modern thought is to return to Kant and re-examine the major assumptions undergirding the transcendental enterprise. The subtitle to Polanyi's Personal Knowledge is "Toward a Post-Critical Philosophy"; this expresses Polanyi's commitment to this goal as his own philosophical task. The particular way Polanyi approached this philosophical task was to develop an epistemology showing that unproven beliefs are the root of all human knowledge. I have suggested that this epistemology is Kantian in that it has an active sense of the knower but post-Kantian in that its author attempts to ground knowledge in a living, historical agent rooted in a community of agents. In its emphasis on the fiduciary, personal and traditional aspects of knowing, Polanyi's work resembles thought of a much earlier era, that of Saint Augustine. Polanyi's post-critical philosophy seems in many ways to recover some strains of Hebraic and Neoplatonic thought lost in the modern perception of philosophical problems.

XUM

In this chapter and the next I shall turn directly to Polanyi's writings. For purposes of clarity, I have divided his non-scientific career into three periods -- each marked by significant publications:

1) The introductory period (up to about 1950) associated with discussions of the values and organizational patterns which produce an effective scientific community: Science, Faith and Society[1] and The Logic of Liberty[2] fall within this period;

2) The early epistemological period (up to about 1960) marked by Polanyi's attempt to articulate an epistemological model and a more general philosophic perspective implied in the model: Personal Knowledge and The Study of Man[3] fall within this period;

3) The late epistemological period marked by Polanyi's further exploration of and reliance upon his theory of tacit knowing: The Tacit Dimension[4] and Meaning fall within this period.

---

[1] Michael Polanyi, Science, Faith and Society (London: Oxford University Press, 1946; Chicago: University of Chicago Press, Phoenix Books, 1964). Future citations are to the Phoenix Books edition and employ only the abbreviation and page number.

[2] Michael Polanyi, The Logic of Liberty (London: Routledge & Kegan Paul, Ltd., 1951). Hereafter cited in abbreviated form as LL.

[3] Michael Polanyi, The Study of Man (Chicago: University of Chicago Press, Phoenix Books, 1959). Future citations are to the Phoenix Books edition and employ only the abbreviation SM and page number.

[4] Michael Polanyi, The Tacit Dimension (Garden City, New York: Doubleday & Co., Inc., 1966; Anchor Books, 1967). Future citations are to the Anchor edition and employ only the abbreviation TD and page number.

XUM

Chapters III and IV discuss the concerns and outlook of at least one significant work within each period in order to portray the content as well as the development of Polanyi's thought. The discussion of Personal Knowledge is lengthy. Polanyi's magnum opus contains his most extensive articulation of the ramifications of his epistemological model. My remarks present the character of Personal Knowledge in terms of seven themes which Polanyi weaves together; I hope, by treating each of these in some detail, to reflect the full shape and scope of Polanyi's outlook.

The fund of philosophical ideas which have emerged in Polanyi's work are not ideas uncommon in modern thought, although the particular arrangement of these ideas in an innovative epistemology with far-reaching implications is without precedent. Polanyi's understanding of man as a social and biological creature closely resembles some of the suggestion made by figures like George Herbert Mead, the early Heidegger, and M. Merleau-Ponty[5] yet none of these thinkers has focused specifically on epistemology. Polanyi's ideas might be described from a comparative position as bringing together two threads prominent in much modern thought: in his theory of tacit knowing and its corollary implications, Polanyi puts together a

---

[5] See David Wesley Long, "Michael Polanyi's Theory of Knowledge" (Ph.D. dissertation, Tallahassee: Florida State University, 1967), pp. 8-72, for an extended discussion of philosophical antecedents and competitors whose ideas may have influenced Polanyi.

XUM

perspective which unites a communal and an existential[6] understanding of man. All of Polanyi's philosophical work focuses on man as a social creature. In the writing of his early period this emphasis is so dominant that his work falls more into the categories of sociology of science or sociology of knowledge than epistemology and philosophy. As Polanyi became more interested in and began working out an epistemology in his middle period he continued to emphasize man's social nature but he had to integrate this with the personal character of knowing. In his late work Polanyi began to see the implications of his theory of tacit knowing as suggesting how man lives as a bodily precritcal creature in the world. Epistemology, at least as Polanyi does it, thus has offered him an opportunity to put together, without sacrificing either dimension, a perspective with emphasis on man's sociality and man's intimately personal mode of operating in his environment. Because Polanyi's thought unites the social and the existential, his perspective might be termed a social existentialism. It is within this general framework that the extended discussion of the specific views and development of Polanyi which follows should be viewed.

---

[6] By "communal understanding," I mean to imply one that attempts to focus on man in terms of his involvement in social process. By "existential understanding," I mean one that attempts to focus on man in terms of his bodiliness and the pre-reflective immanence of the world in the subject.

SECTION B:

PHILOSOPHIC BEGINNINGS

Polanyi's philosophical writing is not that of a life-long professional philosopher whose consuming passion has been to meditate upon the philosophic tradition.[7] For much of his life, Polanyi worked as a scientist. He did not write his first philosophical article until he was nearing middle age. He initiated his early philosophical investigations primarily because he believed that certain contemporary political movements endangered the life of the scientific community; because he wanted to protect science, he became interested in understanding and articulating his view of the structure and foundations of science.

The development of Polanyi's philosophical thinking has been influenced more by his practical experience as a scientist than by his direct involvement with past or emerging philosophical trends. What Polanyi received from this practical experience were not only exceptional skills which he later reflected upon but also a sensitivity to the larger paramaters of scientific practice. Early in his career, because of his work on adsorption, Polanyi was recognized as a brilliant physical chemist. He was invited publicly to present his theory of adsorption in Berlin to an eminent group of scientists which included Einstein. At this presentation Einstein publicly rebuked

---

[7] See TD, p. 3ff where Polanyi refers to his philosophic career as an "afterthought" inspired by some of the events described below.

Polanyi because Polanyi's work did not employ the electrical model of matter which Einstein's work developed. This experience nearly destroyed Polanyi's career as a chemist although his own views were later accepted. The experience first dramatically raised for Polanyi questions about the organization, authority structure and methods of operation of the scientific community. These early questions were reinforced later when Polanyi worked in Germany as a textile chemist and became interested in Soviet scientific affairs. Throughout the thirties, after Polanyi came to England, and the early forties, his interest in Soviet science intensified as the Stalinist persecution of scientists accelerated. In 1935 Polanyi had a conversation with N.I. Bukharin, a leading communist theoretician who held that the distinction between pure and applied science was a capitalist illusion; the Soviet scientist, according to Bukharin, ought to be guided by a sense of social responsibility. True science in Russia was therefore applied science. In these ideas Polanyi saw the specter of a scientific community bound by external controls. Later, controversies in the Russian scientific community raised just this issue and Polanyi became one of the few Western commentators who publicized the discussions and persecutions among scientists which ensued. These events deepened Polanyi's interest in the problems of promoting a mutually beneficial relationship between the scientific community and the body politic. During the second world war, a broadly-based movement among British scientists was initiated to bring the scope of scientific research within guidelines designed to promote the war effort; the problems which Polanyi had publicized and studied in Russia had come home. Polanyi lead a minority movement whose views eventually were accepted, to convince the British government and the scientific community that such a "planned" science would succeed only in damaging the ends for which it was intended; pure scientific research would prosper and best aid the war effort only if individual scientists were free to pursue problems they judged interesting and motivating. It was in this period of discussion over the potentialities of a managed science that Polanyi saw the weaknesses of prevailing philosophic accounts of science and recognized his own need as a scientist to study and articulate an alternative vision of the foundations and methods of science. This was the beginning of his philosophic career.[8]

In 1946 Polanyi published Science, Faith and Society, his first book-length philosophical examination of science. Both this short work and his next book, The Logic of Liberty (an integrated and expanded edition of lectures from the forties), directly reflect their author's concern over the issue of political control of scientific research. In Science, Faith and Society the political issue led to a broader based attempt to articulate the fundamental principles and behavioral practices which allow the scientific community to function.

---

[8] Biographical data and their implications come from Gelwick, pp. 6-11 and SFS, "1963 Preface," pp. 7-9.

XUM

This early essay is not an epistemological treatise per se but it is centrally concerned with knowing as a socially cultivated art.

Polanyi's point of departure for his analysis of science in Science, Faith and Society comes from Gestalt psychology, an important continuing influence upon his work: he argues that science is a specialized enterprise attempting to guess the presence of shapes which are tokens of reality. Science is a specialized form of ordinary perception. This view emphasizes both the creative, intuitive nature of scientific discovery and the component of personal judgment involved in accepting any interpretation of experience. A good scientist combines a powerful intuition, fueled by his passionate desire to make contact with hidden reality, and a sober personal judgment. The scientist's quest is abetted by the sympathy he receives from a naturalistic culture and a specialized community of peers in which he dwells. It is the nurture he receives from this culture at large and from the specialized community which gives him the specialized assumptions about reality which make him a scientist. It is through the novice's trust or faith in his master and the master's trust in his colleagues' work that the wide range of skills and theoretic assumptions necessary for the on-going life of science are transmitted.

As the foregoing suggests, Polanyi argues that it is by virtue of the existence of a community with a living tradition that science is possible. The tradition embodies in the day-to-day work of practicing scientists the prevalent theoretic assumptions defining the current paradigm, the necessary technical skills for scientific work, and the standards of excellence which govern research. The young scientist must, in his involvement with his teachers, internalize all three types of knowledge in order to become a competent professional. Polanyi emphasizes that it is particularly the standards of excellence which are transcendent components of science which decisively shape and sustain scientific life. Ultimately, it is the scientist's conscience which mediates between his creative intuition and the critical caution taught in the community. The element of personal judgment is for Polanyi even in this early essay the crucial component in the creation and upholding of scientific knowledge.

Polanyi's emphasis upon the role of tradition, values and personal judgment in scientific life implies that he believes the authority within science is largely an internal authority. He believes that the scientific community can operate efficiently and effectively only with a pattern of decentralized governance which depends on the responsible decision-making of individual scientists. It is only with "supervisory authority" and not "comprehensive planning" that modern science can expect to continue its unprecedented progress; planning absorbs action under a single control directed from above while supervision allows plural centers of initiation which are then regulated in conformity with inherent purposes.[9]

Science, Faith and Society concentrates upon the role of a tradition, the transcendent ideals and personal judgment of the individual and the structure of authority which prevails in the scientific community. Very clearly, Polanyi's intention at its most direct was to show that science is most productive when it follows the patterns for operation which have naturally evolved in Western societies; attempts to direct science toward whatever good ends will upset the delicate equilibrium of the community's organizational components. Yet, Science, Faith and Society is not merely or even predominantly a political tract; though Polanyi's analysis of science is, at this point, in the form of a sociological investigation, many of the ideas used in his mature philosophy of science and his epistemology are already articulated in a preliminary fashion. Polanyi is also already here interested in the processes of discovery and understanding; as his philosophical thinking matures in the period of Personal Knowledge and The Study of Man these issues become of more central concern. After Science, Faith and Society, Polanyi begins to re-think and reshape his ideas from a more encompassing point of view. His writing becomes more epistemological in character.

---

[9] These terms, "supervisory and comprehensive planning," are ones used to discuss the issue of authority in an essay which was published six years before SFS. Michael Polanyi, The Contempt of Freedom (London: Watts & Co., 1940; reprinted ed., New York: Arno Press, 1975), p. 35ff.

The case of scientific knowledge becomes for him a paradigm case of all knowledge. The opportunity to give the Gifford Lectures (from which Personal Knowledge was written) provided an occasion to work out both a technical epistemology (the theory of tacit knowing) and the more general philosophical perspective implied in this analysis of knowing.

SECTION C:

THE CRITIQUE OF OBJECTIVISM

Personal Knowledge is a lengthy, complex work. It has four central divisions ("The Art of Knowing," "The Tacit Component," "The Justification of Personal Knowledge," and "Knowing and Being") each of which might have easily been published as a separate philosophical work. Yet, the four do fit together as a unity. Personal Knowledge was published more than a decade after Science, Faith and Society;[10] the scope of its allusions suggests that its author was probably involved during this period in a review of the history of Western philosophy. As Polanyi became more involved in articulating his own philosophical ideas, I believe he began to conceive of his developing perspective as an alternative to trends of thought receiving their finest articulation in Kantian philosophy. Yet, Personal

---

[10] The 1951-52 Gifford Lectures are the basis of Personal Knowledge, but differ considerably from the published text. See Gelwick, pp. 380-81 for a list of the Gifford Lecture titles.

Knowledge is not a work devoted primarily to a critical examination of the thought of Kant; it is the heirs of Kant and Hume, the Logical Positivists and positivist influenced philosophy of science, which the critical aspect of Personal Knowledge most directly addresses. It should be emphasized, however, that the critique of Positivism in Personal Knowledge is not a philosopher's point-by-point argument against other philosophers though in places Polanyi does refute specific claims made by other thinkers. When Polanyi speaks of "positivism" he has in mind an epistemology tacitly embraced by large segments of the academic community; it is this tacit positivism which has dictated faulty methodologies based on the ideal of detachment that Polanyi sees as dominating the outlook of the natural and social sciences. As one of Polanyi's interpreters points out, it would not bother him in the least to be told that positivism as an epistemological doctrine is no longer much supported by philosophers *per se*;[11] it is the continuing cultural domination of positivistic ideals that Polanyi seeks to show is epistemological nonsense. It is not, however, the critique of Positivism that forms the major substance of Personal Knowledge; Polanyi saw that the best criticism of prevailing views would be the articulation of a cogent alternative conception of knowledge. This is the major thrust of Personal Knowledge and this positive program begins with Polanyi's discussion of skills. The opening chapters of Personal Knowledge are thus a critical foray directed against certain positivistic views of science, but the last chapter of the opening division, the discussion of skills, already begins laying the groundwork of Polanyi's alternative vision of man's life as a knower.

---

[11] Richard Charles Prust, "The Knowledge and Reality of God: The Theological Implications of Michael Polanyi's Epistemology and Ontology" (Ph.D. dissertation, Duke University, 1970), p. 92.

Polanyi's point of departure in Personal Knowledge questions the ideal of objectivity accepted by the scientific community:

> The purpose of this book is to show that complete objectivity as usually attributed to the exact sciences is a delusion and is in fact a false ideal.[12]

He argues that the greatest discoveries in the history of science have not been purely inductive calculations or hypotheses quickly verifiable with immediate experience; instead, they have been great feats of rational conceptionalization, inherently harmonious and attractive in themselves. This was the case with both the revolutionary ideas of Copernicus and Einstein. The criterion of true objectivity is not minimal personal participation but revolves around a concern for the scope and beauty of rational conceptualization:

> Here, then, are the true characteristics of objectivity as exemplified by the Copernican theory; objectivity does not demand that we estimate man's significance in the universe

---

[11] PK, p. 18.

> by the minute size of his body, by the brevity of his past history or his probable future career. It does not require that we see ourselves as a mere grain of sand in a million Saharas. It inspires us, on the contrary, with the hope of overcoming the appalling disabilities of our bodily existence, even to the point of conceiving a rational idea of the universe which can authoritatively speak for itself. It is not a counsel of self-effacement, but the very reverse -- a call to the Pygmalion in the mind of man.[13]

Polanyi argues that science, under the mechanistic influence of Newtonian physics and its philosophical adaptations, has failed to acknowledge the passionate, personal, and understanding character of knowing which is the core of scientific practice. Scientists and philosophers have sought to explain scientific knowing and scientific knowledge in terms of experimental verification, the simplicity and descriptive character of theories, inductive logic, the accidental character of physical events explainable only in terms of probability, and other similar arguments. Polanyi views all such explanatory accounts, even while sometimes partially valid, as evasive attempts to avoid the responsibility of acknowledging the element of personal understanding in science.

At the very beginning of Personal Knowledge and early in The Study of Man, Polanyi acknowledges that he regards knowledge as a product of an active, passionate comprehension: "I regard knowing as an active comprehension of things known, an action that requires skill."[14] The structures of both these major books of Polanyi's middle period are designed to unfold from this central assumption about the process of knowing. The ostensible aim of the exact sciences, to establish "complete intellectual control over experience in terms of precise rules which can be formally set out and empirically tested,"[15] is a false aim because it eliminates the component of the scientist's personal understanding. For Polanyi, even formally articulated rules are underwritten by the endorsement of those who personally understand and accept them; these informal components of affirmation cannot ever be fully exposed for lucid critical examination. It is thus for Polanyi the meaningfulness-for-persons-in-community of science which he finds important and seeks to explore further. He takes as the paradigm case of such meaningfulness the case of scientific discovery. In discovery the element of rational understanding which Polanyi sees at the core of science points predominantly to the future:

---

[13] PK, p. 5.

[14] PK, xiii.

> I started with the exact sciences, defining them as a mathematical formalism with a bearing on experience. There appeared to be present a personal participation on the part of the scientist in establishing this bearing on experience. This was least noticeable in classical mechanics and I accordingly accepted this chapter of physics as the closest approximation to a completely detached natural science. Its statements could indeed be so formulated as to admit of strict falsification by experience. . . . Yet personal knowledge in science is not made but discovered, and as such it claims to establish contact with reality beyond the clues on which it relies. It commits us, passionately and far beyond our comprehension, to a vision of reality. Of this responsibility we cannot divest ourselves by setting up

---

[15] PK, p. 18.

> objective criteria of verifiability -- or falsifiability or testability, or what you will. For we live in it as in the garment of our own skill. Like love to which it is akin, this commitment is a "shirt of flame" blazing with passion and, also like love, consumed by devotion to a universal demand. Such is the true sense of objectivity in science. . . . I called it discovery of rationality in nature, a name which was meant to say that the kind of order which the discoverer claims to see in nature goes far beyond his understanding; so that his triumph lies precisely in his foreknowledge of a host of yet hidden implications which his discovery will reveal in later days to other eyes.[16]

In summary, Personal Knowledge opens by challenging what Polanyi believes are some of the established assumptions and ideals of the scientific community. He argues that objectivity as traditionally conceived is a misplaced ideal and that the true objectivity of science consists in the penetrating depth of its rational vision of the universe (i.e., it is the coherence and beauty of a vision and not its detachment that is important). He criticizes all views of scientific knowledge which fail to acknowledge the passionate personal participation of the scientist in the process of knowing and upholding the known. It is the active comprehension by a community of agents which Polanyi believes is the deepest root of scientific knowledge. Such comprehension by the scientist as agent is necessarily a skilled act of understanding. The final chapter of the opening division of Personal Knowledge is an analysis of how human skills are a part of our knowing; the following section turns to this discussion which forms the beginning of Polanyi's articulation of an alternative to an objectivist-formalist conception of knowledge.

---

[16] PK, pp. 63-64.

SECTION D:

SKILLS

In the nature of rudimentary skills, Polanyi finds a very rich paradigm mirroring the basic structure of all knowing. The simple act of bodily coordination and the connoisseur's judgment suggest for Polanyi both the character of sophisticated man's mental life in culture and the dynamics of every interaction with the environment. Culture is for Polanyi a complex armory of potential skills which man the skillful tool-user employs for his satisfaction and sustenance. The roots of man's life as a tool-user in the larger human community is the subject of the second division of Personal Knowledge. Before turning directly to this topic, I shall develop a clear view of how Polanyi's central epistemological distinctions and his view of the structure of acts of knowing are grounded in his appreciation of skills.

In skillfully using a tool, a hammer in order to drive a nail, for example, a person focuses on the nail to be struck and not particularly upon his feeling of the hammer handle in his palm or the muscular coordinations necessary to make the hammer stroke. A person is not ignorant of his grip or the muscular coordinations involved in hammering, but he is aware of these elements in a way different than he is aware of the contact of hammer head and nail on which he is focusing. Polanyi points to these two different forms of awareness as a central feature of all kinds of knowing acts:

> When we use a hammer to drive a nail, we attend to both nail and hammer, _but in a different way_. We _watch_ the effect of our strokes on the nail and try to wield the hammer so as to hit the nail most effectively . . . . The difference may be stated by saying that the latter (_i.e._, our feelings of the hammer) are not, like the nail, objects of our attention, but instruments of it. They are not watched in themselves; we watch something else while keeping intensely aware of them. I have a _subsidiary awareness_ of the feeling in the palm of my hand which is merged into my _focal awareness_ of my driving in the nail.[17]

The implications of the distinction established here between subsidiary and focal awareness are, for Polanyi, far reaching. He argues that the distinction reveals the logical structure of acts of knowing. To execute a performance well with a tool requires that the performer focus upon his objective and not on the particular components which conjointly allow realization of this intention. In attempting to explore with a probe a person cannot allow his attention to be diverted to the feeling of the probe in his hand if he hopes to discover what lies ahead of him. Particulars or subsidiaries become meaningful only in themselves (and thus no longer are subsidiaries) and meaningless in terms of their larger purpose if a person loses sight of the pattern or objective which such particulars jointly constitute. Attention can hold only one focus at a time and the knower must choose what is to be focal. The subsidiaries that jointly constitute such a focus must remain logically unspecifiable while that focus is held.

---

[17] _PK_, p. 55.

In the distinction between the two types of awareness involved in a skill Polanyi finds not only the logical structure of acts of knowing but also a practical or performative aspect in all knowing. To claim that knowing has subsidiary and focal components serves to elide the traditional distinction between knowing-what and knowing-how. Every act of knowing-what necessarily at some level involves a knowing-how. To know what this sentence says requires knowing how to read English. For a blind man to know what lies in his path, he must know how to use his probe.[18] That of which a person is subsidiarily aware (e.g., the grip on the probe) always includes elements which are active and practical which are the means by which focal awareness is achieved. At the very least, the performative knowing-how of coordinating the elements which make sense perception is involved in a case of knowing.

---

[18] It can be argued that knowing how to use a probe allows a blind man to know how to move or navigate. This is primarily a semantic difference. By the same token, it can be argued that knowing how to read allows one to know how to respond to a letter -- more conventionally, we say it allows one to know what the letter says. It is true, however, as the work of some of the existential phenomenalists has shown, that it is possible to resolve human knowledge into a whole circle of interdependent practical capabilities in which man lives. Cf. Heidegger's discussion (Being and Time, trans. John Macquarrie and Edward Robinson (New York: Harper and Brothers, 1962), p. 78ff) of Being-in-the world.

XUM

The kernel of Polanyi's view of knowing is derived from his analysis of skills. The distinction between subsidiary and focal awareness suggests certain logical entailments and certain practical characteristics which Polanyi incorporates as the foundation of his model of the knowing process. Knowing is, for Polanyi, a skillful act, and, as I suggested at the beginning of this discussion, skills are knowledge at work. Knowing always involves the coordination of subsidiaries to achieve a focus. The more encompassing claims of Polanyi's perspective are all generalizations built upon this foundation. Three such generalizations, Polanyi's analyses of the part-whole relation, the function of the human body, and his critique of doubt, can be considered as a prelude to Polanyi's larger analysis of man's life in culture.

The analysis of skills in terms of subsidiary and focal awareness can be recast in terms of the part/whole relationship.[19] A whole of meaning becomes apparent when a knower integrates the parts of which he is subsidiarily aware into a focus on which they conjointly bear:

> When focusing on a whole, we are subsidiarly aware of its parts, while there is no difference in the intensity of the two kinds of awareness. For example, the more sharply we scrutinize a physiognomy, the more keenly are we alert to its particulars. Also when something is seen as

---

[19] The acknowledged influence of Gestalt psychology upon Polanyi suggests that the genesis of his epistemology probably came out of his revised view of Gestalt thought about parts and wholes, perception, etc. See TD, pp. 6-7.

> subsidiary to a whole, this implies that it participates in sustaining the whole, and we may now regard this function as its _meaning_, within the whole.[20]

Meaning is thus for Polanyi a focal union which the elements of subsidiary awareness project. A further distinction between two kinds of wholes and two kinds of meaning can be made. If a particular functions primarily as an extensive pointer toward another thing (as, for example, a word points toward an object) meaning is denotational or representative and the whole is a denotational whole. If a particular functions effectively _qua_ particular (_i.e._, as a subsidiary) only within an accredited context which itself is appreciated as meaningful (as, for example, a musical note as a part of a tune), the meaning and the whole are existential rather than denotative.

Polanyi uses the distinction between subsidiary and focal awareness not only to clarify the part/whole relationship but also to illumine the nature of the relationship between the human body and that which is external to it. All human beings with the exception of certain kinds of psychotics accept their bodies as parts of themselves; the body is the instrument on which we rely to appreciate that which is external to us. Like a skillfully used probe, our bodies in most uses are something of which we are not focally aware; instead, we are subsidiarily aware of our bodies in terms of that to which we are attending which is of interest and is external. This is, in fact,

---

[20] _PK_, p. 58.

XUM

how we arrive at a notion of externality:

> Externality is completely defined only if we can examine an external object deliberately, localizing it clearly in space outside. But when I look at something, I rely for my localization of it in space on a slight difference between the two images thrown on my retina, on the accommodation of the eyes, on the convergence of their axis and the effort of muscular contraction controlling the eye motion, supplemented by impulses received from the labyrinth, which vary according to the position of my head in space. Of all these I become aware only in terms of my localization of the object I am gazing at; and in this sense I may be said to be subsidiarily aware of them.[21]

The body is thus for Polanyi the principle tool or subsidiary component with which man deals with the world.

This understanding of the body which is grounded in the subsidiary-focal distinction militates against any philosophical stance in which a radical ontological distinction between the person and the world is drawn. Any tool which man puts to use is like the body in Polanyi's view. A probe becomes an extension of the arm and, like the muscles used to direct it, it becomes a subsidiary which, with other subsidiaries, produces a focal awareness of the terrain before the subject. A tool may, of course, be an external object of introspection but when it is functioning as a tool a person must dwell in it just as he dwells in his physical body:

> Our subsidiary awareness of tools and probes can be regarded now as the act of making them form a part of our

---

[21] PK, p. 59.

XUM

> body. . . . While we rely on a tool or a probe, these are not handled as external objects. We may test the tool for its effectiveness or the probe for its suitability, e.g. in discovering the hidden details of a cavity, but the tool and the probe can never lie in the field of these operations; they remain necessarily on our side of it, forming part of ourselves, the operating persons. We pour ourselves out into them and assimilate them as parts of our own existence. We accept them existentially by dwelling in them.[22]

Because of the indwelt character of tool use, it is not possible in a functional epistemological sense to demark the boundaries of the person at the edges of his bodily contours. We extend our bodies into the world in every use of a tool and the shape of this extension is apt to shift as we move from the use of one needed tool to the next. The range of tools employed by man, Polanyi argues, is, of course, vast. The language, beliefs, and assumptions, including those of a specialized interpretative framework such as that of a scientist, which a person assimilates in life in human society are his tools. Because man relies subsidiarily on such tools, making them function as parts of his body in order actively to create and appreciate the great intellectual and artistic achievements of mankind, Polanyi claims that knowledge is personal knowledge. It is the creation of an individual whose creative activity is possible by reliance on a complex interpretative frame which he has assimilated.

Because personal knowledge is bodily in the sense described, Polanyi believes that it is a vain pursuit to attempt to enumerate exhaustively the grounds on which it rests. The wide range of subsidiary elements involved in any sophisticated act of knowing ultimately involves such a pursuit in an infinite regress. The logical structure of knowing, attending from subsidiary elements to the focal awareness into which they jointly merge, shows that unspecifiability is intrinsic to the process of knowing; the ideal of a purely formal, objective, articulated knowledge is a misplaced ideal ignoring the personal and unspecifiable process by which any knowledge becomes formally articulated.

---

[22] PK, p. 59.

In the same way that an objective formal knowledge is a misleading ideal, Polanyi believes that the ideal of critical doubt which often accompanies it is a false ideal. Since the time of Descartes, doubt has been recommended as a tool with which to separate truth from falsehood. Polanyi rejects this view:

> It has been taken for granted throughout the critical period of philosophy that the acceptance of unproven beliefs was the broad road to darkness, while truth was approached by the straight and narrow path of doubt. . . . The method of doubt is a logical corollary of objectivism. It trusts that the uprooting of all voluntary components of belief will leave behind unassailed a residue of knowledge that is completely determined by the objective evidence.[23]

Polanyi's analysis of knowing as a skillful act employing a wide range of subsidiary elements to achieve a focal awareness shows that it is in fact impossible to doubt actively the whole field of valuing and assumptions in which and through which a person lives. Only paralysis would result if such general doubt were possible. Polanyi argues further that doubt is neither impartial nor heuristic. To disbelieve any given explicit statement presupposes an implicit if not explicit affirmation of an alternative point of view. Disbelief in itself does not lead to the discovery of some kernel of truth:

---

[23] PK, p. 269.

> There exists, accordingly, no valid heuristic maxim in natural science which would recommend either belief or doubt as a path to discovery. Some discoveries are prompted by the conviction that something is fundamentally lacking in the existing framework of science, others by the opposite feeling that there is far more implied in it than has yet been realized. The first conviction may be regarded as more sceptical than the second, but it is precisely the first which is more likely to be hampered by doubt -- owing to excessive adherence to the existing orthodoxy of science. Besides, as there is no rule to tell us at the moment of deciding on the next step in research what is truly bold and what merely is reckless, there is none either for distinguishing between doubt which will curb recklessness and thus qualify as true caution, and doubt which cripples boldness and will stand condemned as unimaginative dogmatism.[24]

In conclusion, Polanyi's critique of the prevailing view of the positive heuristic function of doubt, like his analysis of the bodily character of all human tool-use and his view of meaning as a whole produced through subsidiary knowledge of parts, is a claim grounded in Polanyi's view of the process of knowing. From his analysis of human skills Polanyi concludes that knowing is a skilled

---

[24] PK, p. 277.

XUM

act integrating the bearing of particulars of which a person is subsidiarily aware on the focal whole or performance which they jointly constitute.

SECTION E:
ARTICULATION

The preceding sketch of Polanyi's view of the nature and importance of human skills foreshadows how Polanyi understands man's more sophisticated life. The second division of Personal Knowledge, entitled "The Tacit Component," seeks to display the roots of human knowledge for man the cultural creature. In this lengthy central section of Personal Knowledge, Polanyi considers three topics: human articulation, man's intellectual passions and human conviviality. The perspective which is progressively articulated in treating these three topics as complementary, focuses both on the personal, skilled and prefocal (i.e., tacit) dimensions of knowing and the communal context in which these dimensions are set.

Man's use of symbols is for Polanyi his most monumentally skillful act. Articulation (i.e., the ability to contrive signs, observe their fittingness and interpret their alternative relations) makes life in the human community an exceedingly complex, multifarious affair. Articulation allows a tangible recording of and critical playback of human experience. It is a formalization of

XUM

knowledge and as such it decreases man's dependence on memory and greatly increases the volume of knowledge accessible to the individual. Although articulate knowledge is critical (i.e., can be specifically re-examined), Polanyi argues that the articulate powers of man by which it is produced are acritical. It is man's unspecifiable integrative powers or tacit powers which allow the development and maintenance of articulate systems and man shares these pre-articulate powers with forms of lower life.

Animals show keen inarticulate intelligence in performing tests set for them; man, when deprived of his symbols, is only slightly more adept at handling similar situations.[25] Polanyi discerns three specific classes of inarticulate intelligence in animals -- all of which are primordial forms of faculties more highly developed in man:

> Type A -- Trick Learning: an animal learns physically to manipulate a tool; this is primarily a form of motor learning and consists of the discovery and repetition of a means-ends relationship.
>
> Type B -- Sign Learning: an animal learns to recognize a problem and solve it through recognizing a certain sign; this is a form of perceptual learning and consists of observing a sign-event relationship.
>
> Type C -- Latent Learning: an animal learns to understand a situation and re-apply its understanding in varied circumstances.[26]

In each of these three types of intelligent inarticulate behavior,

---

[25] PK, p. 69.

[26] My summary is drawn from PK, pp. 71-77.

XUM

Polanyi finds two important components. There is the heuristic act whereby the animal for the first time contrives to manipulate the tool, observe the sign-event relation or understand the situation. Secondly, there is the routine act whereby the animal repeats the trick, continues to respond to the sign or solves a routine problem. The heuristic moment, Polanyi argues, shows a type of intelligence which is irreversible, a moment when the penny drops never to be forgotten. The routine act, a second type of intelligence, is reversible in character; it consists of a routine application of established knowledge. Polanyi believes that man's articulate intelligence operates within the same parameters described by these three classes of intelligent pre-articulate acts and these two types of intelligence. Trick learning is a precursor of man's inventive capacities which articulation develops into the vast array of studies associated with engineering and technology. Sign learning in a context of language use has developed into the whole range of observational sciences. The powers of understanding a situation and re-applying such understanding which is manifested in the animal's latent learning is developed by man into the deductive sciences. In each of these human domains heuristic and routine acts of intelligence are sharply distinguished:

> At the articulate level of intelligence, heuristic acts fall distinctly apart from mere routine applications of established knowledge. They are the acts of the inventor and discoverer,

> which require originality and offer scope for genius, differing in this both from the performance of engineers who apply known devices and of teachers demonstrating established results of science. Intellectual acts of a heuristic kind make an addition to knowledge and are in this sense irreversible, while the ensuing routine performances operate within an existing framework of knowledge are to this extent reversible.[27]

The obvious similarity between both the kinds of articulate and inarticulate intelligent behavior and the types of articulate and inarticulate intelligence suggest that man's ability to use language is shaped by the same powers which shape inarticulate intelligent acts. Polanyi argues that man's ability to use symbols in a sophisticated way ensues from a slight superiority of man's prearticulate intelligence which allows him to combine certain important feats of inarticulate intelligence:

> We have seen that in the process of latent learning, described as Type C, animals reorganize their memories of experience mentally. It appears now that the intellectual superiority of man is due predominantly to an extension of this power by the representation of experience in terms of manageable symbols which he can reorganize, either formally or mentally, for the purpose of yielding new information. This enormously increased power of reinterpretation is of course ultimately based on that relatively slight superiority of the tacit powers which constitute our gift of speech. To speak is to contrive signs, to observe their fitness, and to interpret their alternative relations; though the animal possesses each of these three faculties, he cannot combine them.[28]

Language expands man's inarticulate powers making possible a

---

[27] PK, p. 77.

[28] PK, p. 82.

XUM

formalized knowledge subject to critical review. Language, however, is an effective means promoting man's tremendous articulate achievements only because its use by man is reasonably organized. Polanyi's discussion of articulation suggests several fundamental operational principles governing the process of linguistic representation and the operation of symbols. Linguistic representation operates through requirements of poverty and grammar. For a language to be functional it must be poor enough to allow a relatively few words to be used a great many times. If this were not the case, people could not recall enough words to make a language useful; an overly rich language in which a law of poverty does not operate becomes meaningless. If a relatively small number of words is best suited for memory these can function to express a much larger range of ideas only if some law governing combinations of words exists:

> A fixed vocabulary of sufficient poverty must therefore be used within some fixed modes of combination, which always have the same meaning. Only grammatically ordered word clusters can say with a limited vocabulary the immense variety of things that are apposite to the range of known experience.[29]

The laws of poverty and grammar refer to words, but words do not remain distinctly identifiable units unless they are identifiably repeated and consistently used. Thus, Polanyi suggests that the laws of iteration and consistency underlie the requirements of poverty and grammar. For words to be identifiably repeated in different spoken or written contexts, phonemes and letters must be repeatable. They must be defined by some features of distinction which contrast with random configurations. For Polanyi, order can never be derived from randomness but is the presupposition upon which randomness is evaluated.[30] Identifiable shape or sound distinguishes words from shapeless or random utterances but it is their consistent usage which marks them as denotative symbols distinguishing them from clearly repeatable utterances like tunes which are not used to convey a consistent representation. Finally, in addition to identifiable shape and consistent use, a symbol must be of manageable size: a map as large as the terrain it represents is of little use. In summary, Polanyi's study of the order of language use suggests that consistently used, identifiable symbols of manageable size operating within combinatorial principles make for definite meaning as well as a wide range of meaning in language use.

---

[29] PK, p. 79.

It is important to understand that Polanyi's claims about the operational principles governing language use in no way are an attempt to convey the impression that man's symbolic manipulation is

---

[30] Polanyi spends an entire chapter (Chapter 3) in the opening division of PK examining the nature of order and randomness. In that context, his remarks are primarily intended to undercut some views of science based on probability theory; the conclusions are important both here in this discussion of articulation and in Part IV of PK in the evolutionary adaptation of his epistemology. The conclusion about the priority of order again suggests the influence of Gestalt psychology upon Polanyi.

XUM

a machine-like function. The world of pre-linguistic experience is to Polanyi a changing world; language operating within and through the principles suggested is an imprecise way to classify experience. Language is a means of providing relative stability within diversity:

> Since the world, like a kaleidoscope, never exactly repeats any previous situation (and indeed, if it did we would not know it, as we would have no means of telling that time had passed between), we can achieve consistency only by identifying manifestly different situations in respect to some particular feature, and this requires a series of personal judgments. First, we must decide what variations of our experience are irrelevant to the identification of this recurrent feature, as forming no part of it, i.e., we must discriminate against its random background. Secondly, we must decide what variations should be accepted as normal changes in the appearance of this identifiable feature, or should be taken, on the contrary, to discredit this feature altogether as a recurrent element of experience. Thus the Laws of Povery and Consistency imply that every time we use a word for denoting something, we perform and accredit our performance of an act of generalization and that, correspondingly, the use of such a word is taken to designate a class to which we attributed a substantial character.[31]

The generalization implied in language use means that to speak a language gives a person a theory of the universe; to be prepared to speak on future occasions means to anticipate the applicability of language to future experience, to have definite expectations of the future:

> So long as we feel that our language classifies things well, we remain satisfied that it is right and we continue to accept the theory of the universe implied in our language as true.[32]

---

[31] PK, p. 79.

[32] PK, p. 79.

XUM

The act of personal judgment involved in subsuming experience under a symbolic form is an act of re-applying the theory of the universe held by a person to new circumstances. Such an act is strikingly like those acts of lower animals classed as latent learning. The act of judgment involved in the use of language is like that of any skillful connoisseur's judgment. But Polanyi points out that this judgment, like all judgments, can be wrong; the use of language always entails certain perils. A symbolic representation of an experience may not faithfully convey the inarticulate sense of the experience:

> The mind which entrusts itself to the operation of symbols acquires an intellectual tool of boundless power; but its use makes the mind liable to perils the range of which seems also unlimited. The gap between the tacit and the articulate tends to produce everywhere a cleavage between sound common sense and dubious sophistication, from which the animal is quite free.[33]

I have suggested that Polanyi's analysis of language focuses upon the relationship between language use and forms of inarticulate intelligence and upon the way which language use involves skillful acts of generalization; this account has yet to touch upon the intensive personal participation which shapes man's use of language in the quest for knowledge. Polanyi argues that both articulate and inarticulate human intelligence are guided by an active, purposive principle:

---

[33] PK, p. 94.

> The origin of this intellectual striving which (sometimes paradoxically) both shapes our understanding and assents to its being true, must lie in an active principle. It stems in fact from our innate sentience and alertness, as manifested already in the lowest animals in exploratory movements and appetitive drives, and at somewhat higher levels in the powers of perception.[34]

In the example of perception, Polanyi claims that the eyes operate under standards of excellence set, though not consciously, by a person as an agent in the world.

> Perception is manifestly an activity which seeks to satisfy standards which it sets to itself. The muscles of the eye adjust the thickness of its lens, so as to produce the sharpest possible retinal image of the object on which the viewer's attention is directed, and the eye presents to him as correct the picture of the object seen in this way. This anticipates the manner in which we strive for understanding and satisfy our desire for it, by seeking to frame conceptions of the greatest possible clarity.[35]

Another more dramatic sentient example of the active shaping of knowledge in conformity with standards of excellence is the baby's early experimentation with a rattle; in moving a rattle near the eyes and then farther away, a child must choose between seeing a swelling then shrinking rattle or a rattle changing its distance while maintaining its size:

> We had to choose then between seeing the rattle swelling up and shrinking alternately, or seeing it change its distance while retaining its size, and we adopted the

---

[34] PK, p. 96.

[35] PK, p. 96.

> latter assumption. By this way of seeing things we eventually constructed a universal interpretative framework that assumes the ubiquitous existence of objects, retaining their size and shapes when seen at different distances and from different angles, and their colour and brightness when seen under varying illuminations.[36]

Both of these sensory examples suggest that man's handling of subsidiary physical elements seeks to produce a meaningful whole which satisfies our larger sense of the coherence of the world:

> The tremendous generalization, on which we base our understanding of the universe, we have in common with the higher animals. Their native sensory equipment and ours set us similar standards of correct seeing, and it is this primordial standard which induces us to flout, in the case of the inflated ball, the contrary evidence of our retinal images. Indeed, it induces us to intervene actively in producing false evidence of the ball's approach to our eyes, by a misplaced effort of visual accommodation, undeterred by the fact that this destroys the sharpness and the binocular correspondence of our retinal images. The process illustrates clearly the active principle which seeks to establish a coherence between all the clues of visual perception, so that our subsidiary awareness of them in terms of what we see shall satisfy us of having truly comprehended the things seen.[37]

For Polanyi, the case of perception illustrated here prefigures all of man's articulate knowing. Language use is a symbolic extension of the theory of the universe implied in our perception. Like perception, language use is an art guided by self-set standards:

> This process, by which the meaning of sensory clues is established in terms of our perceptions is closely

---

[36] PK, p. 97.

[37] PK, p. 97.

> analogous to that by which we shape the meaning of denotative words in the lifelong course of applying them to a long series of identifiable instances. These linguistic identifications are in fact based primarily on the sensory identification of objects at varying distances, under varying angles and varying illumination, and merely extend the theory of the universe implied in our sensory interpretations to the wider theory, implied in the vocabulary by which we talk about things.[38]

Polanyi understands the drive to fulfill self-set standards in both our acts of inarticulate intelligence and articulate intelligence as the active principle shaping and inspiring man's interaction with his environment. At an articulate intellectual level Polanyi refers to man's quest for knowledge as motivated and shaped by his intellectual passions.

Just as Polanyi's view of language use emphasizes the skillful element of personal judgment and the passional element of creating and fulfilling standards, it also emphasizes the self-modifying character of language use. To be a person dwelling in human culture and speaking a language is to be a creature with an interpretation of the world and the self (though these are not formally articulated or perhaps even articulable). But because the world always brings to us novel situations, the anticipations of the future which our language/cultural experience provides are themselves modified continually:

---

[38] PK, p. 97.

XUM

> Owing to the unceasing changes which at every moment manifestly renew the state of things throughout the world, our anticipations must always meet things that are to some extent novel and unprecedented. Thus we find ourselves relying jointly on our anticipations and on our capacity ever to re-adapt these to novel and unprecedented situations. This is true in the exercise of skills, in the shaping of our perception and even in the satisfaction of appetites; every time our existing framework deals with an event anticipated by it, it has to modify itself to some extent accordingly. And this is even more true of the educated mind; the capacity continually to enrich and enliven its own conceptual framework by assimilating new experience is the mark of an intelligent personality. Thus, our sense of possessing intellectual control over a range of things always combines an anticipation of meeting certain things of this kind which will be novel in some unspecifiable respects, with a reliance on ourselves to interpret them successfully by appropriately modifying our framework of anticipations.[39]

Language use, whether in the case of learning a language, ingesting linguistic innovation, or conversing in every-day encounters, is thus inevitably a process of re-interpreting the world. Polanyi suggests that the modification of meaning in language learning or use is a heuristic act striving for closer contact with reality:

> To learn a language or to modify its meaning is a tacit, irreversible, heuristic feat; it is a transformation of our intellectual life, originating in our own desire for greater clarity and coherence, and yet sustained by the hope of coming into closer touch with reality.[40]

To modify man's tools, his language, means ultimately to modify man's being:

---

[39] PK, p. 103.

[40] PK, p. 106.

> For to modify our idiom is to modify the frame of reference within which we shall henceforth interpret our experience; it is to modify ourselves.[41]

In summary, the view of language developed in Personal Knowledge suggests that man's articulate acts of intelligence are closely akin to the inventive, observational and interpretative acts of inarticulate intelligence found in lower animals. Polanyi argues that man is capable of combining these three types of inarticulate acts and in so doing he achieves a formal knowledge which vastly extends his powers. But the effective functioning of a symbol system or language depends also upon the user's respect for certain general operational principles which will assure that language use will ascertain both definite meaning and a wide range of meaning. Human languages are not rigid codes; they classify experience but only with moderate precision. Human experience is always shifting; the act of subsuming experience under symbolic forms is a manifestly personal judgment. Such acts are acritical skillful acts depending on man's tacit powers and they may always be in error. The skillful element of personal judgment involved in language use is supplemented by a more primordial drive for coherence and meaning which Polanyi believes motivates our language use. This drive which Polanyi believes is innate in all organic forms is best seen in man at the level of perception. Because man is sentient and alert, his vision sets standards for itself which normal seeing strives to fulfill even in cases where physical aspects of visual mechanics have to be ignored. The way we strive for a clear, coherent visual image, meeting our own standards of excellence, prefigures all of man's articulate acts. Language symbolically extends the theory of reality set forth by our skillful perceiving and the use of language to expand a person's knowledge is inspired by the same drive for coherence which actively shapes perception. Our perception and its extension in our language use gives to man a theory of the universe, but this theory and the subject who believes in its bearing on reality are constantly in a process of modification as they confront the novelty of life in the world.

---

[41] PK, p. 105.

SECTION F:

INTELLECTUAL PASSIONS

Polanyi's discussion of articulation in Personal Knowledge portrays his view of how man uses language and how language use produces the complex human culture in which man lives. The image of man as a cultural creature in Personal Knowledge can be seen as an unfolding epistemological exploration of his early Gestaltist view of science as a specialized form of perception. But the image of man as a sophisticated knower rests not only on his articulate powers. The power to represent experience in symbols does not alone account for the complexity of knowledge found in human culture; in Polanyi's view articulation has proved a fecund power because it is inspired by intellectual passions and conviviality. In discussing how passions and conviviality undergird man's exploration of the world, Polanyi touches upon both the most personal components of acts of knowing and the interpersonal sources of these components.

Intellectual passions are the outgrowths of what was previously described at the level of human perception as the active principle shaping human knowing. In the same way that vision strives to fulfill certain standards of clarity, articulate man strives in using his symbols to discover the unknown. Polanyi believes that man is inevitably intrigued by comprehensive levels of meaning whose coherence he only vaguely intuits. Our use of language or any other tool of inquiry to explore the environment is guided and sustained by intellectual passions. Passions function not only to arouse curiosity, but they also actively infuse every inquiry with an element of emotion and provide the subject matter of a discipline such as science with an aesthetic harmony:

> The affirmation of a great scientific theory is in part an expression of delight. The theory has an inarticulate component acclaiming its beauty, and this is essential to the belief that the theory is true.[42]

> A scientific theory which calls attention to its own beauty, and partly relies on it for claiming to represent empirical reality, is akin to a work of art which calls

---

[42] PK, p. 133.

XUM

> attention to its own beauty as a token of artistic reality. It is akin also to the mystical contemplation of nature: a kinship shown historically in the Pythagorean origins of theoretical science. More generally, science, by virtue of its passionate note, finds its place among the great systems of utterances which try to evoke and impose correct modes of feeling.[43]

Polanyi argues that intellectual passions are not mere psychological by-products of human knowing but are intrinsic components which serve logical, heuristic and persuasive functions. In the case of scientific investigation, passions serve the logical function of aiding the scientist in discriminating between scientific and pseudo-scientific projects. It is the scientist's emotive sense of intellectual beauty which helps distinguish between demonstrable facts which are of interest to science and those which are not. Polanyi contends that more specific discriminations of scientific value combine, variously, according to subject matter, the criteria of certainty (accuracy), systematic relevance (profundity) and intrinsic interest. The third, or passional, component increasingly comes to dominate in matters not subject to accurate, systematic analysis:

> The supreme exactitude and scientific coherence of physics compensate for the comparative dullness of its inanimate subject matter, while the scientific value of biology is maintained at the same level as that of physics by the greater intrinsic interest of living things studied, though the treatment is much less exact and coherent. The Freudian

---

[43] PK, p. 133.

> system is perhaps not wholly accepted by science, yet its enormous influence, based on its scientific claims, shows clearly that even a largely conjectural and rather vague doctrine may gain great scientific interest if it deals with man's morality and happiness.[44]

The logical, selective function of passions is complemented by their heuristic function seen in mental acts, such as discovery in which intimations of a solution cause a knower to jump a logical gap:

> Major discoveries change our interpretative framework. Hence, it is logically impossible to arrive at these by the continued application of our previous intrepretative framework. So we see once more that discovery is creative, in the sense that it is not to be achieved by the diligent performance of any previously known and specifiable procedure. This strengthens our conception of originality. The application of existing rules can produce valuable surveys,but does not advance the principles of science. We have to cross the logical gap between a problem and its solution by relying on the unspecifiable impulse of our heuristic passion, and must undergo as we do so a change of our intellectual personality.[45]

In acts of great originality the appreciation of scientific value merges into the capacity for discovering such value. The passions which guide the discoverer in jumping a logical gap, while they may be and are often misleading, are crucial to scientific work. The compelling intellectual beauty which a discoverer finds in a new theory may itself make mandatory the reformulation of a more general view of reality upon which such a new theory can rest. This was the case with Einstein and other great revolutionary scientific thinkers;

---

[44] PK, p. 139.

[45] PK, p. 143.

Polanyi therefore believes that the passionately intuited intellectual beauty of a theory is a token of its contact with reality:

> Accepting this intellectual beauty as a token of reality, Einstein went on to generalize his vision further and to derive from it a series of new and surprising consequences. This was an unfamiliar beauty in science, for it accepted a new conception of reality. Electromagnetic vibrations without any vibrating medium were an affront to the mechanical conception of things which had prevailed in physics since Galileo and Newton. The new beauty inaugurated the modern view of a mathematically defined reality.[46]

Both the nature of reality and the truth of any conception bearing on reality are thus for Polanyi very intimately tied to the passionate commitment and appreciation of a knower for his discovery. Polanyi understands both the truth and the depth of reality of a discovery or vision to be linked to the beholder's intimation of its range of future implications:

> The veridical quality of the system, of which they were then convinced, could not be its _subsequently_ observed fruitfulness. The attempt to replace the quality of truth, in which they believed, by the observation of the fruitfulness which this belief anticipated, is like the Bellman's advice for spotting a Snark by its habit of dining the following day. The mark of true discovery is not its fruitfulness but the _intimation_ of its fruitfulness.[47]

Finally, Polanyi suggests that intellectual passions also have a persuasive function. The passion that aids in choosing problems and in guiding toward solutions also makes claims upon the knower after the solution. A discovery is in a certain sense its own reward, for it satisfies the individual's self-set standards; yet it is not a private pleasure. Discovery seeks response from peers:

---

[46] _PK_, p. 144.

[47] _PK_, p. 148.

> Heuristic passion seeks no personal possession. It sets out not to conquer, but to enrich the world. Yet such a move is also an attack. It raises a claim and makes a tremendous demand on other men; for it asks that its gift to humanity be accepted by all. In order to be satisfied, our intellectual passions must find response. This universal intent creates a tension; we suffer when a vision of reality to which we have committed ourselves is contemptuously ignored by others.[48]

The passion that guides the quest for knowledge is, after its achievement, transposed into a passionate commitment to the validity of such knowledge for others. Polanyi argues that we make our serious assertions about our experience with universal intent; since there are no Archimedian points from which man has access to the nature of reality, our truth claims are claims of broad intention and not claims of final validity. All knowledge comes through the self; our appeal to the universal veracity of our beliefs is itself an appeal sustained by passion:

> Like the heuristic passion from which it flows, the _persuasive passion_ too finds itself facing a logical gap. To the extent to which a discoverer has committed himself to a new vision of reality, he has separated himself from others who still think on the old lines. His persuasive passion

---

[48] _PK_, p. 150.

> spurs him now to cross this gap by converting everybody to his way of seeing things, even as his heuristic passion has spurred him to cross the heuristic gap which separated him from discovery.[49]

Polanyi's analysis of intellectual passions in Personal Knowledge in their selective, heuristic and persuasive roles marks his epistemology and his more general view of man as one rooted in the full, active nature of human life. Knowing is not disembodied, impersonal, or abstract but is infused with the vigor that characterizes man's existence. The discussion of the passions involved in knowing very directly reflects Polanyi's interest in problem solving and discovery in his middle period; these issues have become for him the paradigm cases of knowing. In his earlier writing, Polanyi examined in a preliminary way the master-apprentice relationship, the role of transcendent ideals and the problem of shifting paradigms in the scientific community; the treatment here of discovery in terms of the role of passions is a more careful epistemological examination of the same issues. Polanyi, of course, doesn't take the case of scientific discovery in which passions are highly visible as normative. Passion is transposed into a more temperate type of commitment as great heuristic acts of intelligence filter into the public domain and become routine knowledge. The confident holding of conclusions as a part of one's interpretative framework and the covert faith which a person has in the larger community which shares such conclusions are more ordinary and undramatic examples of the passional component of knowing. Polanyi points out in conclusion that there is a certain parallel between the passions, particularly highly visible ones, infusing human knowing and the force of drives found in man and the lower animals. Polanyi argues that such drives are primitive manifestations of the active principle by which knowledge is grasped and held but that primitive drives are clearly distinguished from intellectual passions of man. Mental passions, unlike appetites, seek to fulfill public rather than purely private demands:

---

[49] PK, p. 150.

> But while appetites are guided by standards of private satisfaction, a passion for mental excellence believes itself to be fulfilling universal obligations.[50]

Mental passions operate within an articulate framework and, unlike drives, leave behind when satisfied a critical knowledge to be permanently enjoyed:

> Our intellectual passions, however, differ essentially from the cravings and emotions which we share with the animals. The satisfaction of these terminates the situation which evoked them. Discovery likewise terminates the problem from which it started, but it leaves behind knowledge, which gratifies a passion similar to that which sustained the craving for discovery. Thus intellectual passions perpetuate themselves by their fulfillment.[51]

---

[50] PK, p. 174.

[51] PK, p. 173.

SECTION G:

CONVIVIALITY AND SOCIAL ORDER

Polanyi's account of intellectual passions shows how the individual's use of articulate powers is inspired and directed. This partially accounts for the range of knowledge embodied in human culture. Intellectual passions which inspire the individual's quest for knowledge are themselves grounded in a more extensive communal élan; Polanyi calls this general framework which undergirds knowing conviviality. Intellectual passions are engendered and supported in the individual because the larger social fabric in which the individual dwells acknowledges and supports the cultivation of such passions:

> Articulate systems which foster and satisfy an intellectual passion can survive only with the support of a society which respects the values affirmed by these passions, and a society has a cultural life only to the extent to which it acknowledges and fulfills the obligation to lend its support to the cultivation of these passions. Since the advancement and dissemination of knowledge by the pursuit of science, or technology and mathematics forms part of cultural life, the tacit coefficients by which these articulate systems are understood and accredited, and which uphold quite generally our shaping and affirmation of factual truth, are also coefficients of a cultural life shared by a community.[52]

Conviviality is thus the sharing of affirmations and obligations among individuals in a community; it is grounded in fundamental human trust and the appreciation of good fellowship. Polanyi argues that man's articulate achievements are in some primordial sense tied to the pleasure human beings take in being with one another:

---

[52] PK, p. 203.

> Pure conviviality, that is, the cultivation of good fellowship, predominates in many acts of communication; indeed, the main reason for which people talk to each other is a desire for company.[53]
>
> The fostering of good fellowship . . . is a direct contribution to the fulfillment of man's purpose and duty as a social being. But the process is also of practical use in making the joint activities of the group more effective.[54]

Ritual acts, though they incur the hostility of individualism's partisans, are for Polanyi a socially important participatory form of pure conviviality:

> By fully participating in a ritual, the members of a group affirm the community of their existence, and at the same time identify the life of their group with that of antecedent groups, from whom the ritual has descended to them. Every ritual act of a group is to this extent a reconciliation within the group and a re-establishment of continuity with its own history as a group.[55]

It is through the convivial context of human relations, affirmed and created in human rituals, that the transmission of social lore is possible:

> The current transmission of this immense aggregate of intellectual artefacts from one generation to another takes place by a process of communication which flows from

---

[53] PK, p. 210.

[54] PK, pp. 210-11.

[55] PK, p. 211.

XUM

> adults to young people. This kind of communication can be received only when one person places an exceptional degree of confidence in another, the apprentice in the master, the student in the teacher, and popular audiences in distinguished speakers or famous writers. This assimilation of great systems of articulate lore by novices of various grades is made possible only by a previous act of affiliation, by which the novice accepts apprenticeship to a community which cultivates this lore, appreciates its values and strives to act by its standards.[56]

Polanyi's discussion of conviviality in Personal Knowledge, like his treatment of intellectual passions, can be seen as a more careful articulation of some of the emphasis upon trust, the role of tradition and transcendent ideals which appeared in his early thought. Conviviality appears now as the social foundation of knowledge and human culture just as intellectual passions appear as a personal force within the individual which has served to promote the development of a human culture embodying a diverse and complex range of knowledge.

The emerging image of man in Personal Knowledge as a sophisticated knowing creature begins with Polanyi's analysis of the structure of knowing as a skillful tacit integration of elements achieving a joint performance or focal understanding. Upon this foundation Polanyi gradually elaborates his conception of the cultural or communal nature of self and knowledge. His discussion shows how articulation expands man's range of tools immensely and offers him the possibility of a critical knowledge. Man explores and creates a complex world with his language. But Polanyi also points out that human articulate powers have proven particularly fecund because they are used by persons inspired by mental passions who are operating within a convivial context. This unfolding picture of man developed in terms of Polanyi's treatment of human skills, articulation, mental passions and conviviality suggest to Polanyi certain general aspects of social organization. Polanyi infers from his view of man a certain vision of the good society. He argues that all forms of societal organization are founded upon shared convictions, shared fellowship, cooperation and a structure of authority. The size and diversity of most social organizations call for specialization of function which entails a willingness to trust others to fulfill standards held at large. Organizations necessarily become hierarchical with those with experience and expertise assuming positions of leadership. Enlightened leadership promotes and protects free thought which provides the new knowledge by which the social organism is renewed. Free thought can be assured only by building cultural and civic institutions that establish rights, duties and authority. The combination of structure, group loyalty and common mores provide the cement of the group. Civic institutions and civic thought are sustained by the same passions and standards which affirm free individual thought. Social change can only be gradual and will be successful to the degree that the whole machinery of society and individual consciousness are

---

[56] PK, p. 207.

XUM

jointly aligned:

> Such is the dynamism of the modern free society. It consists in the moral progress of civic thought, which transmits its conclusions, through the machinery of self-government, into acts of social reform. It is the practical outcome of an intellectual process, moved by its own passions and guided by its own standards. The constitution of a free society expresses its acknowledgement of these passions and standards. Its government bows in advance to the moral consensus freely arrived at by its citizens, not because they so decide, but because they are deemed competent to decide *rightly*, as the authentic spokesmen of the social conscience.[57]

Polanyi is very critical of what he takes to be the modern intellectual's political temper. He understands the modern mind as controlled by two conflicting thrusts coming out of recent history. On one hand, man today has excessive moral passions which call for the immediate re-alignment of the social order to eradicate social injustices. The problems of social organization are complex; this is rarely appreciated. On the other hand, the critical tradition and the ideals of detachment and objectivity accepted in modern culture undercut the moral passions and ideals of man and make him hypercritical of the motives and possibilities of any social change. Polanyi is profoundly skeptical of the possibility of creating a truly egalitarian and just society; he understands the revolutionary temper of modern man which schizophrenically combines moral passion and nihilism as more dangerous than the structured society which prolongs injustice:

---

[57] *PK*, p. 223.

> Unjust privileges prevailing in a free society can be reduced only by carefully graded stages; those who would demolish them overnight would erect greater injustices in their place. An absolute moral renewal of society can be attempted only by an absolute power which must inevitably destroy the moral life of man. . . . The attempt made in this book to stabilize knowledge against skepticism, by including its hazardous character in the conditions of knowledge, may find its equivalent, then, in an allegiance to a manifestly imperfect society, based on the acknowledgement that our duty lies in the service of ideals which we cannot possibly achieve.[58]

The penultimate combination of moral passion and nihilism for Polanyi is found in Marxist social thought and its various social experiments around the world.

The ideas about political and social organization which Polanyi presents in Personal Knowledge are ideas which grow out of the evolving image of man he is developing. Polanyi is by no means an idealist about man's possiblities for creating the kind of social order embodying the boldest designs of the French Revolution. He is highly critical of the modern temper and his own conceptualizations, emphasizing structure and order, seem primarily designed to incorporate the possibility of free thought into social life. In this respect, Polanyi has not departed but has built upon some of his ideas in earlier writing concerning the desirability of a scientific community with a supervisory rather than a comprehensively planned authority structure. Obviously, Polanyi's views are very much influenced also by his acceptance of and involvement in a British parliamentary democracy with its common law tradition.[59]

---

[58] PK, p. 245.

SECTION H:

TRUTH, COMMITMENT AND THE FIDUCIARY STRUCTURE OF KNOWLEDGE

In the opening two divisions of Personal Knowledge, an image of man as a skillful, symbol-using knower inspired by mental passions and working within a convivial context emerges. This is the way Polanyi understands man as a sophisticated cultural creature. The third section of Personal Knowledge attempts to round out this image by pulling together certain themes which have only been tangentially treated. In his chapters focusing upon the fiduciary structure of all knowing, the limits of critical doubt, and the role of commitment in redeeming personal knowledge from subjectivism certain important emphases of Polanyi's epistemology become clearer. Polanyi is in these chapters eager to show that his epistemological perspective is not an affirmation of irrationality or a denial of man's possibility of discovering something which can be asserted as true;

---

[59] It is a profitable enterprise to view the whole of Polanyi's thought in terms of this social location. The antipathy toward social theory not rooted in the common law tradition, while Polanyi's arguments are often very cogent, is probably also colored by Polanyi's Hungarian past and his response to the Hungarian Revolution (which occurred in the period in which Personal Knowledge was being prepared for press).

XUM

he attempts to show that human rationality and the discovery of truth are themselves possibilities which exist within the patterns of communal life.

Polanyi's conception of how man acquires knowledge argues that he draws on certain focally hidden or subsidiary components; it is this tacit dimension of knowledge and the powers by which it is dynamically coordinated into a focus which makes formal knowledge. In general, Polanyi's conception of knowledge is much broader than an objectivist or formalist conception of knowledge (since it includes tacit knowledge). At the same time, because Polanyi posits that formal knowledge depends upon man's tacit powers to produce or understand it, knowing is recognized as an activity that is to a large extent controlled by factors which are not focally conscious. Polanyi suggests that we need to credit man with the possession of "much wider cognitive powers than an objectivist conception of knowledge would allow," while at the same time recognizing that our powers of rational judgment lack the independence "claimed traditionally for the free exercise of reason."[60]

The example of the definition of terms illustrates nicely Polanyi's conception of the tacit foundation of all knowledge. A word is a tool and a confident use of a term makes it function subsidiarily. But when we use a dictionary to try to formalize the meaning of a term what we succeed in doing is formalizing a meaning by confidently using and understanding a new series of unformalized terms:

---

[60] PK, p. 249.

> The formalization of meaning relies therefore _from the start_ on the practice of unformalized meaning. It necessarily does so also _in the end_, when we are using the undefined words of the definitions. Finally, the practical interpretation of a definition must rely _all the time_ on its undefined understanding by the person relying on it. Definitions only shift the tacit coefficient of meaning; they reduce it but cannot eliminate it.[61]

The situation with language is essentially the situation with all human knowledge. But for Polanyi the indeterminancy of words or of any knowledge does not imply that human knowing is a faulty process but that persons are capable of making such indeterminancy bear on reality:

> I have also said before that we must accept the risks of semantic indeterminancy, since only words of indeterminant meaning can have a bearing on reality and that for meeting this hazard we must credit ourselves with the ability to perceive such bearing.[62]

Knowledge or meaning is thus irrevocably tied to persons for Polanyi. This seems a trivial enough conclusion, yet, for the most part, human beings tend to think of knowledge, meaning, and facts as self-warranted; they are considered as having an ontological status apart from the bearing on reality which they have for persons. Polanyi argues that there are no impersonal facts just as there are no anonymous checks. A person's active participation in understanding a fact, in appropriating its significance as it bears on reality, is a positive and constitutive aspect of knowledge, not a mere defect.

---

[61] _PK_, p. 250.

[62] _PK_, p. 251.

Polanyi's attempt in the third section of his *magnum opus* to give a firmer conception of personal knowledge includes a discussion of the demonstrable character of knowledge. Polanyi's affirmation of the personal and tacit aspects of knowing are in no way intended to deny that knowledge may be rationally or logically arrived at and substantiated or that formalized knowledge possessing such characteristics is invaluable. The earlier sections of *Personal Knowledge* have already expressed Polanyi's commitment to and appreciation for rational, formal knowledge: the critique of positivism hinged upon Polanyi's belief that the scientist is capable of making expansive, beautiful rational conceptualizations about the universe; similarly, Polanyi's discussion of articulation attributes man's critical powers and the complexity of human knowledge to man's ability to produce formal knowledge. Although he has highly praised the rational and formal, Polanyi's affirmation of a personal knowledge includes also the conviction that the demonstrable character of knowledge operates within a given frame of reference. He argues that the demonstrable or rational character of a given conclusion rests upon a person's crediting of a broader context of knowledge in which the given fact makes sense and can be adduced as a conclusion to the problem in question.

Polanyi discusses the logic of affirmation or proof at three different levels: at the level of an individual fact; at the level of an axiomized system of facts; at the level of alternative, unformalized systems of interpretation. In the first case which resembles the previously discussed example of defining a term, a given fact can be demonstrated because a broader horizon surrounding the fact is held by a person on an undemonstrated, tacit basis. These underlying, tacitly held facts may themselves one by one be subjected to scrutiny but only on the basis of a tacit holding of other undemonstrated assumptions. Polanyi argues that it is important that we do not engage in the infinite regress of trying to prove everything; we trust in others and the information they have given us or the traditions they embody. Verification thus inevitably has a circular structure in which unformalized assumptions play an important part.

In the second case, with an axiomized formal system, there still remains an element of dependence on unformalized knowledge because the formlization becomes meaningful in terms of a person's tacit abilities:

> Thus, at a number of points, a formal system of symbols and operations can be said to function as a deductive system only by virtue of unformalized supplements, to which the operator of the system accedes: symbols must be identifiable and their meaning known, axioms must be understood to assert something, proofs must be acknowledged to demonstrate something, and this identifying, knowing,

> understanding, acknowledging, are unformalized operations which the working of a formal system depends. We may call them the semantic functions of the formal system.[63]

This general view of the dependent character of formalization, articulated in terms of the tacit character of knowing, is in keeping with the Gödel mathematical demonstration of the limits of formalization.

The third instance of the dependence of formal demonstration moves to the broader level of alternative systems of interpretation. Polanyi argues that a person's understanding of an event or his ability to demonstrate the efficacy of a certain point of view is tied to the assumptions which he has made tacit as he dwells in a community promulgating those assumptions. This means that the principle of doubt is in no way effective for assertaining the truth in situations in which particians hold completely different understandings of reality. Polanyi demonstrates this broadly circular aspect of demonstrability and interpreation with the anthropological research of Evan-Pritchard. Evan-Pritchard's study of the Azande tribe shows how a conceptual framework embedded in a language operates logically to affirm a view of events which a Westerner finds completely illogical. The Azande believe in the powers of the poison-oracle:

> The oracle answers questions through the effects on a fowl of a poisonous substance called benge. The oracle-poison is extracted from a creeper gathered in a traditional manner, which is supposed to become effective only after it has been addressed in the words of an appropriate ritual. Azande -- we are told -- have no formal

---

[63] PK, p. 258.

> and coercive doctrine to enforce belief in witch-doctors and their practice of the poison-oracle, but their belief in these is the more firmly held for being embedded in an idiom which interprets all relevant facts in terms of witchcraft and oracular powers.[64]

If the witch-doctor answers a certain question affirmatively based on the apparent effects of the poison on the fowl and then must immediately afterward answer negatively because the anticipated effects were not realized, this would, to a Westerner, discredit the oracle. But the Azande culture denies this perspective because it has several explanations for self-contradiction:

> They may assume that the wrong variety of poison had been gathered, or a breach of taboo committed, or that the owners of the forest where the poisonous creeper grows had been angered and avenged themselves by spoiling the poison; and so on.[65]

Similarly, the Azande resist any suggestion that benge might be a natural poison:

> He often asked Azande, he tells us, what would happen if they were to administer oracle-poison to a fowl without delivering an address, or if they were to administer an extra portion of poison to a fowl which has recovered from the usual doses. "The Zande" -- he continues" does not know what would happen and is not interested in what would happen; no one has been fool enough to waste good oracle-poison in making such pointless experiments which only a European could imagine. . . . Were a European to make a test which in his view proved Zande opinion wrong they would stand amazed at the credulity of the European. If the fowl died they would simply say that it was not good

---

[64] PK, p. 287.

[65] PK, p. 287.

> *benge*. The very fact of the fowl dying proves to them its badness."[66]

The Azande seem to possess a whole implicit system of beliefs about the world which can be rationally brought to bear on any given situation. In this sense they are as logical, reasonable, and open to empirical evidence as their Western counterparts from whom they so decisively differ:

> "They reason excellently in the idiom of their belief," (says Evans-Pritchard), "but they cannot reason outside, or against, their beliefs because they have no other idiom in which to express their thoughts."[67]

Polanyi argues that the resiliancy of Azande belief suggests three characteristics of systems of interpretation. First, the stability of a system of interpretation rests in the fact that objections to it can be met one by one. Objections can be satisfactorily met on this basis because the system is circular and each defeated objection in fact becomes a powerful affirmation of the validity of the whole. Second, the stability of a system of interpretation includes the ability the system has to generate an account for any conceivable eventuality; the Zande ability to find legitimate reasons for the oracle's consecutive reversed answers shows how an interpretative matrix expands to deal with unprecedented situations. The third aspect of stability ensues from the way persons dwelling in a set of implicit beliefs deny rival conceptions the ground in which they might take root:

---

[66] *PK*, p. 288.

[67] *PK*, p. 288.

> The behavior of Azande whom Evans-Pritchard tried to convince that _benge_ was a natural poison which owed none of its effectiveness to the incantations customarily accompanying its administration, illustrates the kind of contemptuous indifference with which we normally regard things of which we have no conception. "We feel neither curiosity nor wonder," writes William James, "concerning things so far beyond us that we have no concepts to refer them to or standards by which to measure them." The Feugians in Darwin's voyage, he recalls, wondered at the small boats, but paid no attention to the big ship lying at anchor in front of them.[68]

This third defense mechanism of implicit beliefs Polanyi calls suppressed nucleation.

Polanyi's analysis of demonstrability dramatically shows how rational, logical or empirical proof always depends on the unformalized knowledge and tacit powers of a human knower. His discussion of the Azande, shows particularly well the extent to which the fabric of belief in which we live butresses the knowledge we hold to be valid. Knowledge always depends upon the fiduciary structure of belief which a person's involvement in social life gives to him. Man actively shapes his own knowledge with the beliefs he tacitly brings to bear upon the sitatuations he confronts. Yet, for Polanyi the claim that knowledge is actively shaped by the knower and that it rests on a fiduciary structure is not a claim which implies that human

---

[68] _PK_, p. 291.

XUM

knowledge is an atomized field as diverse as the numbers of individual human beings. Persons dwell in communities with an on-going pattern of actions. The shape of personhood is molded by participation in the form of life embodied in a specific historical, social, and linguistic location. Man's being is that of a being-in-the-world. By virtue of this communal and historical character of existence, the fiduciary structure which an individual brings to bear in an act of knowing is never an exclusive possession. Its components are to some degree shared with others whose existence takes their form and color through participation in the same social and historical fabric. The participation of persons in a common community with a common destiny creates thought which is to a large degree unified. Belief is a shared feature of life and is thus the root of common knowledge. For Polanyi the responsible acknowledgement of the social fabric involved in shaping him and generating the matrix of beliefs undergirding his knowledge extends even to the writing of Personal Knowledge:

> I must admit now that I did not start the present reconsideration of my beliefs with a clean slate of unbelief. Far from it, I started as a person intellectually fashioned by a particular idiom, acquired through my affiliation to a civilization that prevailed in the places where I had grown up, at this particular period of history. This has been the matrix of all my intellectual efforts. Within it I was to find my problem and ask the terms for its solution. All my amendments to these original terms will remain embedded in the system of my previous beliefs.[69]

---

[69] PK, p. 252.

As the interpenetrating personal and social character of Polanyi's epistemological perspective becomes clearer in the third division of Personal Knowledge, Polanyi takes up two issues which seem particularly vulnerable points in his theory of personal knowledge: how is the personal distinguished from the subjective?; how is it possible to have adequate criteria of truth in an epistemology grounded in the person? To treat these issues Polanyi draws a clearer portrait of the personal aspect of knowing and shows how in the commitment situation the personal and the universal claim of knowledge merge.

Polanyi denies that a fully objective knowledge is possible; an objectivist view of knowing sets an impossible ideal which disenfranchises the knower:

> Our theory of knowledge is now seen to imply an ontology of the mind. Objectivism requires a specifiable functioning mindless knower. To accept the indeterminacy of knowledge requires, on the contrary, that we accredit a person entitled to shape his knowing according to his own judgment unspecifiably.[70]

Although Polanyi believes a full objectivity is not possible for human knowers, his claims for personal knowledge are not an affirmation of subjectivity. Within Polanyi's view personal knowing takes place in a flow of passion; intellectual passions and the self-set standards which they strive to fulfill are the mark of personal knowledge. The personal is thus different from both an objective ideal with its focus on impersonality and from subjective experience understood as a passive endurance of experience. Much of human experience is subjective but, because some of our knowing is not merely a passive submission to events but is actively entered into, all knowledge is not subjective; it rises to the level of the personal by seeking to submit to requirements understood as independent of itself:

---

[70] PK, p. 264.

> In so far as the personal submits to requirements acknowledged by itself as independent of itself, it is not subjective; but in so far as it is an action guided by individual passions, it is not objective either. It transcends the disjunction between subjective and objective.[71]

The example of problem solving further draws the distinction between subjective and personal knowledge and shows how personal knowledge holds within it the commitment to the universal validity of a problem's solution for its discoverer. To solve a difficult problem requires originality in the form of personal initiative to frame the problem and creatively jump the logical gap to its solution. Passion and commitment to the enterprise are at work all along in the entertainment of the possibility of seeing the problem, the possibility of finding a solution, and finally in the belief in the validity of the solution found. The solution discovered is believed by its discoverers to be a legitimate solution -- one that other people who study the problem should acknowledge as fitting. The standards under which investigation of the problem has proceeded are in this sense impersonal, universal standards, although they have been personally accepted by the investigators. The solution discovered vies for public acceptance in terms of its claim to fulfill these universal standards; the solution is advanced with universal intent. Personal knowledge thus for Polanyi aims at universal intent; it entails a commitment freely entered upon to something believed to be impersonally given.

---

[71] PK, p. 300.

Because personal knowledge aims at universal validity, it is not merely whimsical or purely individual. Polanyi deeply believes that persons operate with self-set standards; human mental acts have accepted the jurisdiction of values believed to be broadly acknowledged as adequate for the guidance of thought. It is only because of the factor of commitment operating within a context of standards believed to be impersonal that large organized institutions of inquiry like science are able to operate; personal knowledge under the compulsion of universal intent establishes a responsibility among persons: "*The freedom of the subjective person to do as he pleases is overruled by the freedom of the responsible person to act as he must*."[72] The sense of compulsion which Polanyi associates with responsible knowing implies the inevitability of judgments on the part of the knower and these for Polanyi may always be wrong. In summary, the framework of commitment within which Polanyi sets the operation of human knowing in Personal Knowledge includes both a claim for the competence of persons to make judgments -- to shape their knowledge in light of their beliefs -- advanced with universal intent and a claim for the necessity of the possibility of error and alternative points of view:

---

[72] *PK*, p. 309.

> To accept commitment as the framework within which we may believe something to be true, is to circumscribe the hazards of belief. It is to establish the conception of competence which authorizes a fiduciary choice made and timed, to the best of the acting person's ability as a deliberate and yet necessary choice. The paradox of self-set standards is eliminated, for in a competent mental act the agent does not do as he pleases, but compels himself forcibly to act as he believes he must. He can do no more, and he would evade his calling by doing less. The possibility of error is a necessary element of any belief bearing on reality, and to withhold belief on the grounds of such a hazard is to break off all contact with reality. The outcome of a competent fiduciary act may, admittedly, vary from one person to another, but since the differences are not due to any arbitrariness on the part of the individuals, each retains justifiably his universal intent. As each hopes to capture an aspect of reality, they may all hope that their findings will eventually coincide or supplement each other.[73]

The appeal to the future apparent here in Polanyi's view suggests the particular way that he conceives of truth as an attribute fitting within the commitmental character of knowledge. Polanyi rejects a correspondence theory of truth understood as a coincidence of the knower's subjective belief and the actual facts. For Polanyi there are no facts or reality apart from the accrediting they receive by a committed knower. A dualistic approach to truth proceeds from a misleading ontological bifurcation which divides the subject from the world. The truthful character of human knowledge for Polanyi is not determined by correspondence but by the power a statement has to reveal aspects of the reality to which the knower is committed; the full dimensions of a believed-in reality may remain largely hidden such that the truth of a claim rests upon the intuited indeterminant range of its future implications:

---

[73] PK, p. 315.

> An empirical statement is true to the extent to which it reveals an aspect of reality, a reality largely hidden to us, and _existing therefore independently of our knowing it_. By trying to say something that is true about a reality believed to be existing independently of our knowing it, all assertions of fact necessarily carry universal intent. Our claim to speak of reality serves thus as the external anchoring of our commitment in making a factual statement.[74]

The truthful character of human knowledge for Polanyi is not tied to an internal-external dialectic but revolves instead around the feeling which a knower has for the rightness of an action as it fulfills the impersonal self-set standards held by the knower. When truth is understood as the rightness of mental acceptance, Polanyi argues it becomes apparent that there are varying degrees of personal participation (i.e., there are different modes in which commitment is invested) in matters known depending on subject matter. The kinds of personal involvement in knowing range from the almost impersonal sciences in which feelings of mental rightness are engendered by logical and empirical evidence to the acts in which the knower's commitment is more existential and is elicited by more internal evidence:

---

[74] _PK_, p. 311. Some of Polanyi's interpreters emphasize strongly the independence of reality (see Long, "M. Polanyi's Theory of Knowledge"; and Kuhn, "Personal Knowledge and the Crisis of the Philosophical Tradition," _Intellect and Hope_, pp. 111-136). I believe this wrongly attempts to make an empiricist of Polanyi. Polanyi's claims for the independence of reality must be seen as very much bound up with the passionate, committed, universally intending nature of knowing. He does not slip into a dipolar ontology.

> Once truth is equated with the rightness of mental acceptance, the transition from science to the arts is gradual. Authentic feeling and authentic experience jointly guide all intellectual achievements; so that from observing scientific facts within a rigid theoretical framework we can move by degrees towards dwelling within a harmonious framework of colours, of sounds or imagery, which merely recall objects and echo emotions experienced before. As we pass thus from verification to validation and rely increasingly on internal rather than external evidence, the structure of commitment remains unchanged but its depth becomes greater. The existential changes accepted by acquiring familiarity with new forms of art are more comprehensive than those involved in getting to know a new scientific theory. A parallel movement takes place (as we shall see) in passing from the relatively impersonal observation of inanimate objects to the understanding of living beings and the appreciation of originality and responsibility in other persons. These two movements are combined in the transition from the relatively objective study of things to the writing of history and the critical study of art.[75]

It is Polanyi's claim that a person's responsible quest for knowledge is guided by his beliefs, engendered by life in society, and the universal standards he comes to accept. His conception of truth as the rightness of mental acceptance operates within this framework. For those who do not share either Polanyi's faith in the potentiality of persons for responsible action or the ontological realism implied in his perspective (i.e., the conclusion that knowledge is a creation/ discovery of persons and any attempt to give knowledge, fact, reality or truth an ontological status apart from their epistemic link with persons is unwarranted speculation), this position appears as an affirmation of a subjective relativism. The claims for responsible judgment with universal intent operating within a specific historical and social fiduciary context appear either as an absurdity or as an idealistic attempt to instill a touch of morality into relativism. But Polanyi does not believe that either of these critiques is valid. He understands true knowledge as very much tied up with the passionate quest for an understanding of reality which man, the social and historical creature, undertakes as a part of his nature. The link between our convictions, our social location and interests, and knowledge is unseverable. Man's potentiality for responsibility redeems his historicality preventing it from jeopardizing his knowledge; man's particular social location, in fact, provides the specificity which is the opportunity for engaging in the quest for knowledge. Our knowing stems from our personal existence and to accept our concreteness is to accept our calling:

---

[75] PK, p. 321.

> Believing as I do in the justification of deliberate intellectual commitments, I accept these accidents of personal existence as the concrete opportunities for exercising our personal responsibility. *This acceptance is the sense of my calling.*[76]

The third division of *Personal Knowledge* can be seen as a section in which Polanyi's alternative vision of man as a knower comes to fruition. The epistemological model sketched in Polanyi's initial discussion of skills, the *Lebensphilosophie* and the more general image of man as a knowledgeable cultural creature which emerge in Polanyi's discussion of human articulation, mental passions and conviviality are rounded out in Polanyi's discussion of the commitmental and fiduciary aspects of knowing and his analysis of truth. Polanyi portrays knowing as an active shaping of judgment (*i.e.*, bringing to bear of tacit components on a situation) which inevitably is indebted to the social milieu in which it occurs. But a knower's dependence on the tacitly held fabric of belief internalized in his involvements in an historical community does not reduce knowledge to subjectivity. Because a person actively shapes his knowing -- because he has self-set standards to which he is passionately committed -- personal knowledge can be affirmed with universal intent. Personal knowledge bears on aspects of reality to which a person as an agent operating within his calling (*i.e.*, his position as a living, social being which provides his opportunities for knowing) is committed; insofar as it fulfills self-set standards held to be impersonal, it can confidently be offered to peers as a true revelation of reality. This whole way of articulating the nature of knowing in the third section of *Personal Knowledge* in terms of a person's commitment, his acceptance of standards and his involvement in the life processes of a community, is an innovative conception; yet the seeds for Polanyi's conception of truth and his view of the commitmental and fiduciary structure of knowing were already present in his discussions in *Science, Faith and Society* of such ideas as the necessity of trust in peers on the part of the research scientist, the importance of the scientist's transcendent ideals, and the view of science as the discernment of the *Gestalten* of reality.

---

[76] *PK*, p. 322.

SECTION I:

THE EVOLUTIONARY ONTOLOGY

The final division of *Personal Knowledge*, entitled "Knowing and Being," shifts the argument of Polanyi's *magnum opus* into a new key. The first three divisions of *Personal Knowledge* work out an epistemological model which is progressively elaborated and broadened into a more general understanding of man and a *Lebensphilosophie*; the final division, in the context of addressing the topic of evolution, attempts to set this understanding of man in its broader context in a vision of the universe. In this section Polanyi is working out what he later calls "the ontological aspect of tacit knowing."[77] He attempts to move from his conclusions about the nature of knowing to a coherent, harmonious view of the orders of being in this final development:

> In the rest of this book I shall outline some views on the nature of living beings, including man, which clearly follow from the acceptance of my commitment to personal knowledge. Having decided that I must understand the world from my point of view, as a person claiming originality and exercising his personal judgment responsibly with universal intent, I must now develop a conceptual framework which both recognizes the existence of other such persons and envisages the fact that they have come into existence by evolution from primordial inanimate beginnings.[78]

Polanyi's attempt to extend the epistemology he has developed in an analysis of the larger domain in which human life and human history occur is, to be sure, the most difficult section of all his writing. Its complexity reflects the breadth and detail of its author's scientific background. The section is undeniably the most speculative component of Polanyi's perspective; but it also is perhaps the clearest reflection of the encompassing imagination of its author. Polanyi ends his magnum opus with this evolutionary cosmology both because evolution is a topic which he, like many modern thinkers influenced by science, saw as philosophically important, and because he recognized his epistemological formulations as in direct contradiction with much of the substance of modern biological thought.

---

[77] TD, p. 13. Further discussion of this topic follows in the treatment of TD.

[78] PK, p. 327.

In his final section Polanyi attempts to set forth both an analysis of the central common features of all life and a more general stratified view of the universe. He wants to develop both a hierarchical vision of the cosmos and to account for man's emergence and role in this hierarchy. In general Polanyi understands the universe as composed of an ascending series of progressively more complex and more personal comprehensive entities. This series culminates in the being of man; the study of man, which Polanyi sees as an exercise in mutuality, becomes for him the highest form of living achievement. The intricate articulation of this holistic, encompasing vision of the universe is grounded basically in Polanyi's fundamental distinction between the tacit and explicit components of knowledge; the point of departure for Polanyi's argument establishes what he calls the "molar" character of known entities populating the universe:

> Our comprehension of a living individual entails a subsidiary awareness of its parts which is not wholly specifiable in more detached terms. This understanding acknowledges a particular comprehensive -- i.e., "molar" -- achievememt of the individual itself. Since our knowledge of this molar function is not specifiable in "molecular" terms, the function itself is not reducible to molecular particulars; it must be acknowledged therefore as a higher form of being, not determined by these particulars. We can reach this conclusion directly by recalling that the understanding of a whole appreciates the coherence of its subject matter and thus acknowledges the existence of a value that

is absent from the constituent particulars.[79]

Polanyi begins to expand this conception of the stratified nature of known beings into a hierarchical view of the universe by first working out what he calls a "logic of contriving."[80] It is the aim of such a logic to show, in terms of the structure of an act of knowing, how an object of knowledge has a multi-level kind of being and what logical entailments this involves. The example of the machine Polanyi uses as a central illustration demonstrating that a known object always has both a lower and a higher level of embodiment. A machine has both a level of operational principles and a lower physical-chemical level; it cannot be understood by reducing it to a physical-chemical description:

> We have a solid tangible inanimate object before us -- let us say a grandfather clock. But we do not know what it is. Then let a team of physicists and chemists inspect the object. Let them be equipped with all the physics and chemistry ever known, but let their technological outlook be that of the stone age. Or, if we cannot disregard the practical incompatibility of these two assumptions, let us agree that in their investigations they shall not refer to any operational principles. They will describe the clock precisely in every particular, and in addition, will predict all its possible future configurations. Yet they will never be able to tell us that it is a clock. The complete knowledge of a machine as an object tells us nothing about it as a machine.[81]

---

[79] PK, p. 327.

[80] PK, p. 328.

[81] PK, p. 330.

The machine qua machine can thus be understood only in terms of its purpose which is embodied in its operational principles. These principles are "rules of rightness"[82] which account for the success of the machine but not for its failures which are analyzable in terms of causes (rather than reasons). The comprehensive feature of a machine is its principles and this is what the machine is for a knower:

> . . . physics and chemistry are blind both to success and failure, since they ignore the operational principles by which success and failure are defined. We identify a machine by understanding it technically; that is, by a participation in its purpose and an endorsement of its operational principles. . . . If any object -- such as, for example, a machine -- is essentially characterized by a comprehensive feature, then our understanding of this feature will grant us a true knowledge of what the object is.[83]

The comprehensive features of a machine are its technical features while the physical-chemical components are its scientific features. In most human knowledge these two are combined and human powers of contrivance are thereby immensely enriched. The machine (or technology, more generally) embodies in its rules of rightness a rational way to achieve a purpose. The technical strategem, if it succeeds in achieving this purpose, can be said to do so in accordance with its "own premeditated internal reasons."[84]

This analysis of machines which Polanyi designates "the logic of contrivance" is extended to man and the animals in order to better conceptualize the structure of life. All animals in some ways resemble a machine; this is true at least in the sense that an animal uses its body in machine-like ways in accordance with mechanical principles. The originality of animals, however, raises questions as to how far this line of comparison can be extended. Some physiologists and psychologists attempt to account for originality in terms of an ingenious automatic machinery much like the automatic pilot of an airplane. Although a machine-like conception of living beings can be used to account for the adaptative capacities of animals, this is a view which Polanyi judges untenable on the basis of his own fundamental assumption that all animals possess and employ tacit powers to guide their behavior:

---

[82] PK, p. 329.

[83] PK, pp. 330-31.

[84] PK, p. 332.

> I accept the responsibility for drawing an ever indeterminate knowledge from unspecifiable clues, with an aim to universal validity; and this belief includes the acknowledgement of other persons as responsible centres of equally unspecifiable operations, aiming likewise at universal validity. To me, therefore, the works of Shakespeare offer a massive demonstration of a creativity which cannot be explained in terms of an automatic mechanism. . . .
>
> This conceptual framework strongly suggests to me the presence of an active centre operating unspecifiably in all animals. . . . I have linked the unformalizable powers of originality to the whole range of tacit, often passionate coefficients which account for all the powers of an articulate intelligence. I have said that this tacit urge sustains throughout our culture the coherence and fertility of fixed symbolic operations that were initially contrived by this urge itself. I believe that, on the grounds of continuity, we should acknowledge that the same urge operates also primordially throughout the

> animal kingdom. There are then two principles at work in animals; namely, (1) the use of machine-like contrivances and (2) the inventive powers of animal life. Accordingly, while the animal's machinery embodies fixed operational principles, this machinery would be impelled, guided and readapted by the animal's unspecifiable inventive urge -- even as rigid symbolic operations are accredited and steadily reinterpreted by the tacit powers that affirm them.[85]

Polanyi argues that all animal life possesses extraordinary ability to adapt old patterns to new situations; examples of this range from the powers mutilated rats have to run mazes to the abilities of the crippled Renoir in old age to paint well with his brush bound to his forearm.[86] All such instances are for Polanyi a demonstration of the skillful acritical powers shared by all animals. The presence of such powers thus implies that an animal must be considered as an initiator -- a center of intelligent action -- deploying tacit powers rather than as an automatic mechanism.

The powers for re-organizing under modified conditions found in higher animals can, Polanyi argues, be shown to parallel the process of embryonic development found in lower organic life. H. Driesch first discovered the ontogenic principle in the sea urchin which illustrates the unspecifiable powers of regeneration which life possesses:

> Throughout its cleavage stage any cell or combination of cells detached from the embryo will develop into a normal

---

[85] PK, pp. 336-37.

[86] PK, p. 337.

> sea urchin. Driesch characterized these regenerative powers of an embryo by describing it as an "harmonious equipotential" system. The capacity of the germ to build up a normal embryo in spite of severe amputations is more widely referred to today as "morphogenic regulation" . . . . For the moment it is enough to observe that the powers of improvisation, discovered by Driesch in embryonic fragments, have proved up to this day just as inexplicable in terms of fixed anatomical structures as have the powers of functional regeneration manifested throughout the animal kingdom -- from the amputated centipede to the paralysed Renoir.[87]

Polanyi's argument which has shifted from a discussion of the molar character of the being of all entities to an analysis of tacit powers of organic life thus now seeks to link the biological and the epistemological: he suggests that functionally regenerative and literally regenerative capabilities are both rooted in the tacit powers of all life. Resourceful action recognized in higher animals can be generalized to appear as a process of growth much like reproductive powers:

> . . . the capacity for coherent and resourceful action can be generalized to a process of growth. The principle of equipotentiality is thus equated to acknowledgement that we cannot identify the phenomenon discovered by Driesch, except by crediting any fragment whatever of the early sea-urchin embryo with the capacity to grow into a complete individual. This is a capacity for utilizing indeterminate means for achieving a comprehensive feature that we deem to be right, and it can be envisaged only by acknowledging this instrumental relationship in these terms. It foreshadows, therefore, to this extent the kind of faculty which enabled Renoir to continue painting after he was paralysed, and

---

[87] PK, p. 338.

> beyond that, the whole range of personal judgment and originality which we acknowledge when properly attending to a thoughtful person. The morphogenetic principle discovered by Driesch thus reveals itself as the primordial member of an ascending series of homologous processes, which cannot be understood except as the resourceful achievement of a comprehensive rightness, and every one of which dissolves altogether in the light of any more impersonal examination.[88]

The important logical claim embedded in Polanyi's speculation about the continuity between heuristics and morphogenetic regulation is that an organism, whether at the top or the bottom end of the evolutionary scale, must be recognized as a self-centered initiator of action. Just as the molar character of a machine must be recognized, so must the molar character of an organism be acknowledge; the higher level of functioning in the organism cannot be understood in terms of physics and chemistry. This higher level is for Polanyi an organismic center (perhaps conscious, perhaps not) from which tacit powers are deployed.

Polanyi uses the logical distinction established here to make further claims about the structure of knowledge which recognizes individuals; this analysis in turn becomes the foundation of Polanyi's stratified vision of human knowledge. All knowledge is for Polanyi personal and to some degree unspecifiable. Knowledge of the inanimate world is the most general and most fully specifiable form of knowledge.

---

[88] PK, p. 340.

The knowing of individuals which is involved in man's recognition of living beings includes a complexity of meaning not shared by inanimate matter:

> But a living individual is altogether different from any of the inanimate things, like tunes, words, poems, theories, cultures, to which we have ascribed meaning before this. Its meaning is different, perhaps richer, and above all, it has a centre. The focus of our comprehension is now something active, that grows, produces meaningful shapes, survives by the rational functioning of its organs; something that can behave and acquire knowledge, and at a human level, can even think and affirm its own convictions.[89]

Natural sciences and biological and social sciences can be distinguished in terms of the different logical levels on which they operate. Natural sciences have only two levels: the level on which the observer/knower stands and the level at which the studied subject matter exists. In the transition from natural sciences to biological sciences, a third logical level gradually comes into play. As the scientist comes to regard his subject matter as a creature capable of deliberate behavior a middle level emerges: a top level is occupied by the observer/knower, a middle level by the observed creature understood as a creature with an interpretative framework manifest in action, and a bottom level is constituted by the realm in which the creature acts. Paralleling the increasing complexity of meaning involved in moving from sciences with two logical levels to sciences with three, Polanyi sketches out an increasingly personal ascending series of the sciences. Natural sciences as two-tiered are more impersonal and observational; their excellences are associated with features of symmetry, harmony, and precision. In moving up the ladder into the biological sciences, the studied subject matter becomes progressively more personal and is less amenable to precise analytical treatment. Biological sciences as three-storied are more interpretative than observational. In the transition from biology to the social sciences and the humanities the subject matter becomes even more personal; it holds a certain natural interest for men as convivial social creatures although it is not possible to make the kind of precise generalizations found in physics in the social sciences. Human knowledge as it moves toward the point of knowing man thus becomes progressively more existential in meaning and the act of knowing moves progressively toward becoming an exercise in mutuality.

---

[89] PK, p. 344.

As the foregoing sections have shown, Polanyi uses his epistemology to generate a general stratified typology of human knowledge. He sketches out a continuum of the sciences ranging from the relatively impersonal comprehensive entities studied in the natural sciences to the highly personal, existentially known, complex comprehensive entities treated in the social sciences. According to this typology, Polanyi's metaphoric image of the universe resembles a set of Chinese boxes; the universe is populated by a hierarchy of comprehensive entities each more encompassing than its constituents. The important logical distinction that grounds this typology is Polanyi's affirmation of the molar character of every comprehensive entity; just as a machine cannot be resolved into its physical and chemical constituents, neither can any comprehensive entity in the hierarchy be adequately understood and represented in terms of its subsidiaries in themselves. This principle can be extended to show that with higher living forms the centered character of an individual which cannot be reduced to lower principles must be acknowledged. Before developing Polanyi's evolutionary argument which draws on these logical distinctions and expands his stratified vision of the universe, Polanyi's perspective can be summarized around four points:

> (1) Living beings can be known only in terms of success or failure. They comprise ascending levels of successful existing and behavior.
> (2) We can know a successful system only by understanding it as a whole, while being subsidiarily aware of its particulars; and we cannot meaningfully study these particulars except with a bearing on the whole. Moreover, the higher the level of success we are contemplating, the more far-reaching must be our participation in our subject matter.
> (3) Therefore, to interpret systems that can succeed or fail in the more detached terms, by which we know systems to which no distinction of success or failure applies, is logically impossible. Systems that can succeed or fail are properly characterized by operational principles, or more generally, by certain rules of rightness; and our knowledge of any class of things that is characterized by a rule of rightness disappears when we attempt to define it in terms that are neutral to this rightness.
> (4) Accordingly, it is as meaningless to represent life in terms of physics and chemistry as it would be to interpret a grandfather clock or a Shakespeare sonnet in terms of physics and chemistry; and it is likewise meaningless to represent mind in terms of a machine or of a neural model. Lower levels do not lack a bearing on higher; they define

XUM

> the conditions of their success and account for their failures, but they cannot account for their success, for they cannot even define it.[90]

Polanyi's discussion of evolution is designed to account for the rise of man. He attempts to show that the rise of human personhood is the culmination of a logic of emergence; he recognizes man as the biological innovation at the apex of a series of such innovations, each with its own place and excellence. He links the innovative powers of understanding found in man with biological innovation suggesting that both are the result of the tacit powers shared by all living forms. Polanyi's treatment of evolution thus attempts to bring together his epistemological analysis, his typology of knowledge and a teleological understanding of biological achievement.

Polanyi's conception of evolution claims that evolution is a process of innovation producing progressively higher biotic achievements. He acknowledges that his views would be termed vitalism by the chief proponents of Neo-Darwinism. Geneticists tend to view evolution as a succession of accidental heriditary changes offering reproductive advantages to their bearers:

> The predominant modern theory, usually described as Neo-Darwinism, which I shall criticize here, regards evolution as the sum total of successive accidental hereditary changes which have offered reproductive advantages to their bearers. The sequence of hereditary changes, leading to the replacement in succeeding generations of the

---

[90] PK, pp. 381-82.

XUM

> original types by better equipped variants, is described as "natural selction," and the "force of natural selection" is supposed to have brought forth the successive forms of life that have eventually produced man.[91]

Polanyi criticizes this view because it lacks a clear conception of how genetic changes produce a better equipped organism. This, in turn, belies the logical inadequacy of a theory that only covertly acknowledges the uniqueness of a living form. Genetic theory tends to resolve changes in form and actional capabilities into changes at the level of physical and chemical structure:

> There is a fundamental vagueness inherent in this theory which tends to conceal its inadequacy. It consists in the fact that we lack any acceptable conception of the way in which genic changes modify ontogenesis -- a deficiency which is due in its turn to the fact that we can have no clear conception of living beings as long as we insist on defining life in terms of physics and chemistry. My argument will be based on a different conception of life. I shall regard living beings as instances of morphological types and of operational principles subordinated to a centre of individuality and shall affirm at the same time that no types, no operational principles and no individualities can ever be defined in terms of physics and chemistry. From which it follows that the rise of new forms of life -- as instances of _new_ types and of _new_ operational principles centered on _new_ individualities is likewise undefinable in terms of physics and chemistry.[92]

Polanyi's treatment of evolution concentrates on the rise of novel modes of operation in life. The appearance of new biotic operations implies the inanimate origins of all life. From an epistemic view such an event spawning life entails two things:

---

[91] _PK_, pp. 382-83.

[92] _PK_, p. 383.

> It is clear that for such an event to take place two things must be assured: (1) Living beings must be possible, *i.e.* there must exist rational principles, the operation of which can sustain their carriers indefinitely; and (2) favorable conditions must arise for initiating these operations and sustaining them. In this sense I shall acknowledge that the *ordering principle* which originated life is the *potentiality* of a stable open system; while the inanimate matter on which life feeds is merely a *condition* which *sustains* life, and the accidental configuration of matter from which life had started had merely *released* the operations of life. And evolution, like life itself, will then be said to have been *originated* by the *action* of an ordering principle, an action *released* by random fluctuations and *sustained* by fortunate *environmental conditions*.[93]

The logical situation obtaining in the rise of life from inorganic matter can be sharply portrayed by considering an example not fraught with the confusion of a genetic discussion:

> The stability of a living being has been strikingly compared by W. Ostwald to that of a flame. One speaks today more generally of "open systems," but a simple gas flame contains all that is relevant. It represents a phenomenon of constant shape, fed by a steady inflow of combustible material and releasing a continuous flow of waste products and of the energy produced by combustion. Once a flame has been started, its shape and chemical composition can be varied without extinguishing it. To this extent, its identity is not defined by its physical or chemical topography, but by the operational principles which sustain it. A particular collocation of atoms may accidentally fulfill the conditions for starting a flame, but this accident itself can be defined as such only by its bearing on the system of ordering principles

---

[93] *PK*, p. 384.

> which establishes the possibility of stable flames.[94]

An open system cannot be described only in terms of the conditions which create and sustain it; the principle operative in the system itself must logically be recognized because the system has stability (*i.e.*, it continues to operate):

> The atomic configuration which ignited a flame keeps renewing itself within the flame. It is a fundamental property of open systems, not described before now, that they stabilize any improbable event which serves to elicit them.[95]

Recognition of the form or of the individuality of a living being as I have earlier called it,[96] is a logical necessity according to Polanyi. The function of inanimate matter in creating the conditions for the emergence of life and sustaining it could not themselves be acknowledged as meaningful without at least a covert or tacit recognition of the functioning of the stable system of organization into which they feed. The operational principle functioning in a stable system must for Polanyi be recognized as a self-created possibility or achievement grounded in the potentiality of its subsidiaries (*i.e.*, the morphological field).

The argument developed here outlining the logical necessities of an analysis of the origin of life is simply re-applied by Polanyi to the problems of accounting for changes in life forms in history. Since the evolution of forms of life occurs so slowly, functional innovations are not directly observable, although they do take place in longer periods. The trend toward higher levels of organization (i.e., specialization) is undoubtable; it includes among its conspicuous features the deepening of sentience and the rise of thought. Certain lines of evolution have unquestionably been more effective than others; the principle of the endoskeleton, for example, offered a broader scope for evolution than an exoskeleton.[97] Observable genetic variations are not, however, clearly indicative of long-range evolutionary trends. In a given period of observation a great many adaptative advantages will appear which actually form no part of a larger evolutionary trend. The theory of natural selection wrongly accepts all such mutations producing reproductive advantage as evidence of evolutionary progress. Such random advantages do not add up to the evolution of a new set of operational principles. For Polanyi, the theory of natural selection is inadequate because it reduces evolutionary progress to adaptative capability and fails to see that a conception of adaptative advantage is predicated upon a definite end:

---

[94] *PK*, p. 384.

[95] *PK*, p. 384.

[96] As is apparent, this argument is simply a more careful development of Polanyi's analysis of the two-tiered and three-tiered structure of the sciences. (See above pp. 102-104.)

> . . . the theory of natural selection, by subsuming all evolutionary progress under the heading of adaptation

---

[97] PK, p. 385.

> as defined by differential reproductive advantage, necessarily overlooks the fact that the _consecutive_ steps of a long-range evolutionary progress -- like the rise of human consciousness -- cannot be determined _merely_ by their adaptive advantage, since these advantages can form part of such progress only insofar as they prove _adaptive in a peculiar way, namely on the lines of a continuous ascending evolutionary achievement_. The action of the ordering principle underlying such a persistent creative trend is necessarily overlooked or denied by the theory of natural selection, since it cannot be accounted for in terms of accidental mutation plus natural selection. Its recognition would, indeed, reduce mutation and selection to their proper status of merely _releasing and sustaining the action of evolutionary principles_ by which all major evolutionary achievements are defined.[98]

Polanyi's argument does not deny that mutations produce reproductive advantages but that such accidental changes account for the consecutive stages of novelty necessary to reach a definite form. Changes such as development of protective coloring are passive advantages which might be established by random mutation plus natural selection; such changes are not major operational changes (_i.e._, phylogenetic shifts) but are conditions which might contribute to the release of new operational principles. The distinction here between the action by which an organism can be said to function _qua_ organism and to reshape its pattern of organization and the conditions which release such reorganization is crucial:

> As long as we can form no idea of the way a material system may become a conscious, responsible person, it is an empty pretence to suggest that we have an explanation for the

---

[98] _PK_, p. 385.

> descent of man. Darwinism has diverted attention for a century from the descent of man by investigating the conditions of evolution and overlooking its action. Evolution can be understood only as a feat of emergence.[99]

The re-shaping of a form of organization (i.e., the emergence of novelty in the presence of unprecedented principles) is for Polanyi a biotic achievement; an organism as a stable system possesses certain powers which are unspecifiable which bring into being new forms. In summary, Polanyi rejects the theory of natural selection as a form of reductionism. A long-range evolutionary trend cannot be accounted for without acknowledging that an organism is a stable open system having powers to develop different sets of operational principles which culminate in the achievement of a certain end. The appearance of unprecedented forms of organization cannot be understood only in terms of accidental mutation: ". . . the action which generates the embodiment of a novel ordering principle always lies in this principle itself."[100] This analysis of biotic achievement attributes to the organism dynamic properties analogous to those of a system by which the potential energy of the system decreases.[101]

This logic of emergence whose broad outlines I have sketched can, for Polanyi, offer a coherent account of anthropogenesis. Successive biotic achievements have developed progressively higher forms of organization moving through stages that eventually achieved finite personal destiny (i.e., sexual reproduction), sophisticated perception and articulation in man. This process is one in which personhood has slowly been concretized. The novel stages along the course of anthropogenesis can be identified and appraised; some of the conditions releasing innovation can be specified but the powers establishing resourceful reorganization remain unspecifiable. The development of new forms of operation is a slow process which Polanyi compares with the process of maturation in a child:

---

[99] PK, p. 390.

[100] PK, p. 401.

[101] PK, p. 402.

> In the course of anthropogenesis, individuality develops from beginnings of a purely vegetative character to successive stages of active, perceptive and eventually responsible, personhood. This phylogenetic emergence is continuous -- just as ontogenetic emergence clearly is. Hence the higher principles governing the emergent forms of evolution presumably gain control gradually of the evolving beings, in the same way as they gradually become more pronounced and predominant in the course of man's embryonic and infantile development. We shall say, in particular, that the rise of man includes a continuous intensification of individuality, similar to that which normally takes place in the formation of a human person from the parental zygote. No new creative agent, therefore, need be said to enter an emergent system at consecutive new stages of being. Novel forms of existence take control of the system by a process of maturation.[102]

The rise of new forms of organization as a gradual process like ontogenetic maturation can be compared to human knowing insofar as it operates under self-set evolving standards:

> Comprehension is an unformalizable process striving towards an unspecifiable achievement, and is accordingly attributed

---

[102] PK, p. 395.

> to the agency of a centre seeking satisfaction in the light of its own standards. For it cannot be defined without accrediting the intellectual satisfaction of the comprehending centre. The unspecifiability of a conscious act of comprehension implies the impossibility of accounting for it in terms of a fixed neurological mechanism; and the intellectual commitment involved in such an act excludes any representation of it in terms of a physico-chemical equilibration which cannot distinguish between success and failure. Comprehension and the somatic process which accompanies comprehension, represent therefore a kind of equilibration that can be defined only in terms of intellectual rightness. Morphogenesis, operating under the direction of a morphogenetic field, is a somatic process of the same kind, but following morphological rightness as its standard of achievement. Yet it may be described as equilibration, to distinguish it from the operation of a machine-like framework, and also to illustrate the inexhaustible resourcefulness shown by morphogenetic process. Once it is recognized that this resourcefulness is mobilized in the service of an achievement which can be appreciated only in morphological terms, we find that this implies awarding to it success or failure, by standards which we ourselves set to the process as being appropriate to itself. The morphogenetic field (or its organizer, if there is one) is then defined as the agency of this success and as that which has failed if success is not achieved.[103]

The similarity Polanyi sees between the structure of knowing and the structure of biotic achievement is for him not a mere chance similarity but a real continuity. The rise of man as an articulate responsible knower is the crowning achievement of evolutionary emergence. It is principally on the direct evidence of man's existence and his powers that Polanyi rests his case for a teleological view of evolution:

---

[103] PK, p. 398.

> . . . all attempts at explaining the evolution of complex organs by chance variations in certain chemical bonds of the germ plasm must fail. But I must admit once more that I would not feel so certain of this, had I not before me the rise of human personhood, which manifestly demands the assumption of finalistic principles of evolution.[104]

Man's powers employed in the search for knowledge lead him into the unknown; the complex structure of the universe seems to beckon and guide man to its discovery. In the same way, Polanyi believes that living beings transform themselves into yet uncreated forms; they are guided only by the potentiality for such new individuation which their realization establishes:

> In any case, it is not so much the suggested explanatory framework, but the fact of phylogenetic emergence itself that is so astounding; and this fact, I believe, is indisputable. It is a process of maturation which differs in the most curious manner from that of ontogenesis; for it is a maturation _of the potentialities of ontogenesis_. The evolutionary process takes place in the germ plasm, but it manifests itself in the novel organism which the germ plasm potentially embodies. It occurs in one place and manifests itself in another. Hence if, contemplating the process of anthropogenesis, we are clearly convinced -- as I am -- that this is in fact so, we are _driven_ to assume that the maturation of the germ plasm is _guided_ by the potentialities that are open to it through its possible germination into new individuals. We are actually facing then the operations of a phylogenetic field guiding anthropogenic maturation along the gradients of phylogenetic achievement -- as clearly as the embryologist faces morphogenetic fields derived from the gradient of ontogenetic achievement.[105]

---

[104] _PK_, p. 402.

[105] _PK_, p. 400.

SECTION J:

THE ACHIEVEMENT OF PERSONAL KNOWLEDGE

Personal Knowledge is a philosophical work with systematic elegance; it is Polanyi's only expansive cumulative articulation of his philosophical perspective. The preceding discussion of the themes Polanyi develops in his *magnum opus* has been lengthy; the following consolidated summary attempts to focus the impact and scope of Polanyi's work in his middle period.

Personal Knowledge can be viewed as a philosophical treatise with both a critical and a constructive objective. In its critical aspect Personal Knowledge is a critique of philosophical ideas flowing directly out of positivistic epistemology and philosophy of science and secondarily out of the conceptions of earlier figures such as Descartes, Hume and Kant. Polanyi regards modern consciousness as a critical and scientistic consciousness. He seeks to analyze and refute the presuppositions upon which such an outlook is based. He rejects all attempts to conceptualize science as the pursuit of an objective impersonal knowledge. In its constructive aspect, Personal Knowledge is an attempt to develop an epistemology and a philosophy grounded in a conception of a responsibly-held, personal knowledge. Beginning with some basic epistemological distinctions, Polanyi gradually articulates a more encompassing understanding of man and concludes with an evolutionary ontology.

Many of the themes which Polanyi ably develops in his constructive philosophy of the middle period can be seen in germ form in his earlier work. The analysis of science in Science, Faith and Society draws heavily on Gestalt psychology; as Polanyi began working specifically on an epistemological model in his middle period he used Gestalt perceptual analysis as his foundation. In his early thinking, Polanyi emphasizes the role of a naturalistically disposed culture and a tightly-knit specialized community in training young scientists; he sets forth the master-apprentice relationship as a paradigm for education. His analysis of conviviality, his critique of skepticism and doubt and some of his treatment of language in Personal Knowledge build directly upon these early ideas. Science, Faith and Society stresses the fiduciary component of knowledge, the elements of personal judgment and responsibility, and the transcendent ideals of the scientist; these elements are expanded in Polanyi's later development of such themes as the role of belief in knowing and the structure of commitment. As these parallels suggest, Personal Knowledge is by no means a new start for its author; Polanyi has simply returned to some of his basic concerns and ideas with new intensity and thoroughness in Personal Knowledge.

The logic of the perspective laid forth in Personal Knowledge develops from the central distinction Polanyi establishes between the subsidiary and focal components of knowledge. Explicit or focal knowledge is the articulate form of knowledge (i.e., what in ordinary usage is called knowledge) to which a knower is self-consciously attentive. Formal knowledge is upheld and produced by an active integration of subsidiarily-held particulars or tacit components. Such tacit components are unspecifiable in the given act of understanding (and often, as in the case of internal bodily functions, they are never specifiable). A knower dwells in tacitly known assumptions, skills, etc., in order to be aware focally of the comprehensive whole which such tacit knowledge constitutes. The distinction which Polanyi establishes here as the foundation of his thought is a functional distinction between the articulate, conscious result of process and the intermediate elements which make the process and its outcome possible. Polanyi views knowing as an active comprehension of things known.

With his emphasis on the active, intentional, coordinated character of the process of knowing, it is not surprising that Polanyi views rudimentary physical skills as both the basic level of and the paradigm for all human knowing. Skills such as the use of a probe vividly illustrate how a knower attends from (or integrates) tacitly-held particulars (such as the grasp on the probe, the coordination of muscles, etc.) to the meaningful whole at which a skillful performance aims. In the case of a physical skill it is clear that a "knowing what" involves a "knowing how," Polanyi contends that all knowing -- even sophisticated articulate knowing -- is performative. In a skillful action both the body and any tools employed function as items of which the agent is not focally conscious; a knower is always subsidiarily aware of his body and his tools in terms of that to which he is attending. Knowing thus for Polanyi is always bodily in form. Although the body and external tools are the subsidiary components used in man's dealing with the world, there exists no radical ontological distinction between person and world. The tools which we use become extensions of our bodies but, because we can lay aside some tools in favor of others more appropriate to new tasks, our bodies have a flexible worldly character. For Polanyi, the range of tools employed by man extends to include the language, beliefs, and assumptions -- including those of specialized communities such as science -- which a person assimilates in articulate life in human society. By relying subsidiarily on such articulate tools, man appreciates and contributes to the great intellectual and artistic achievements of mankind.

The sophisticated life of man as _homo faber_ is for Polanyi predicated upon his powers of articulation. The use of symbols gives man formal knowledge and all the powers which ensue from the opportunity critically to playback human experience. Polanyi argues that articulate human intelligence is an outgrowth of inarticulate powers demonstrated in inarticulate acts of lower animals; he stresses that man's language capacities from which the depth and complexity of human culture have sprung are constituted by the slim margin of superiority man has over other creatures. Humanity alone has the ability to combine powers of contriving signs, observing their fitness and interpreting their alternative relations. Human language has become the powerful tool which it is because its use is guided by certain operational principles which make it consistent and manageable. Polanyi contends that human languages are not rigid codes; they classify experience with only moderate precision. Human experience, even though it cannot be fully separated from language, is always shifting; to subsume experience under symbolic forms is always a manifestly personal judgment dependent upon the acritical skillful acts of the knower which may always be in error.

Both human language use and all the skillful inarticulate acts of man and lower animals are in Polanyi's view inspired by an active intellectual striving. This striving, which in man is called the quest for knowledge, can be seen at an elemental level in the preconscious attempt to achieve a focally clear image in seeing. Because man is sentient and alert, his vision sets standards for itself which normal seeing strives to fulfill. The drive to fulfill self-set standards and achieve a meaningful coherence which is apparent in perception prefigures all man's articulate acts. Language symbolically extends the theory of reality set forth by our skillful perceiving and the use of language is a skill inspired by the same drive for coherent meaning which actively shapes perception.

Polanyi generalizes his conception of skillful perception and language use operating under self-set standards in his conception of the responsible and truthful aspects of knowing. In sophisticated articulate endeavors such as the study of a problem by a scientist the scientist operates under self-set standards. Such standards protect a personal knowledge from the charge of subjectivism. The scientist inherits his standards as he assimilates both the theoretic assumptions allowing selection and study of his problem and the ideals of professionalism (i.e., scientific conscience) in his involvement in the scientific community. Most of the important assumptions which a knower employs are accepted in trust from other members of his working community. A personal knowledge is thus implicitly fiduciary in character. The specific judgments which a knower such as a scientist is called upon to make (for example, judgments about the validity of a solution to a problem) are made in conformity with internalized self-set standards. Commitment is the predominant criterion for the validity of a personal knowledge though in many areas of investigation such as the hard sciences, there are established procedures for verification through which personal commitment is expressed. The self-set standards shaped by communal participation of a knower are standards aiming at universal validity: a knower believes that his discoveries are binding not only upon himself but also upon all others. The personal and the universal are thus correlated in the commitment situation. The truthful character of human knowledge for Polanyi is tied to the feeling which a knower has for the rightness of an action as it fulfills self-set standards.

The drive for coherence that Polanyi believes inspires clear

XUM

perception in man is called intellectual passion as it is manifest in sophisticated human knowing. All of life is for Polanyi in some sense subject to a desire for satisfaction through interested participation in its environment. Man as symbol user is the most reflective of all living beings and is constantly lured by the unknown. Personal knowledge is motivated by a quest for the unknown and is infused by human vitalities. It is impassioned; the ideal of an impersonal comprehension of facts is for Polanyi wholly misleading. In sophisticated articulate life, intellectual passions serve three important logical functions: they guide the knower in selecting problems or perspectives in which to dwell; they inspire originality by encouraging heuristic integrations (in the form of emotive intimations of coherence); they function persuasively in making claims upon the knower after a discovery.

Polanyi contends that the passions that infuse and sustain man's activities as a knower are rooted in a more primordial fellow feeling that exists between men. The pleasure people enjoy in being with one another in a community either directly or indirectly inspires the articulate achievements of man. Such conviviality is the emotive medium allowing the transmission of social lore. Intellectual passions are engendered and supported in the individual because the larger social fabric in which he dwells acknowledges and supports the cultivation of such passions. Polanyi's assumptions about the most adequate forms of social organization are directly derived from his view of the importance of creating a convivial community and a people free and obligated to pursue their intellectual passions in the quest for knowledge.

In summary, the view of man and of his potentialities as a knowing creature which Polanyi sets forth in the first three divisions of Personal Knowledge is an intricate tapestry slowly woven. Polanyi's attempt to produce a philosophical alternative to critical thought begins with a rudimentary analysis of skills which mirror his view of the basic structure of knowing. Once the fundamental distinction between tacit and explicit knowledge and the skillful bodily nature of knowing are elaborated Polanyi turns to man as an articulate symbol user. His analysis of human symbolic abilities portrays both the kinship between articulate and inarticulate intelligent acts and the vast scope of man's superiority over lower forms of life ensuing from the development of a critical knowledge. Man as a skillful language user is portrayed as a creature operating with self-set standards. Polanyi argues that such standards, operative in an elemental pre-conscious way in perception and language use, operate even more generally in the self-conscious inquiry of persons in established communities of inquiry. Such self-set standards protect a personal knowledge from whimsicality because such standards, when maturely held, both encourage self-scrutiny and aim at universal validity. The view of man as a social creature and a socially located knower which emerges in Personal Knowledge focuses on the necessity of human responsibility. Responsibility is expressed by the knower both in his commitment to his own powers of judgment as adequate to discern and pursue truth and in his

XUM

acceptance of his own finite, historical situation. Knowledge is inevitably fiduciary in character insofar as it rests upon a person's acceptance of his own judgment as it is informed by a commitment to the trustworthiness and value of other knowers. The quest for knowledge is impassioned in character because it is, at the most elemental level, inspired by human conviviality and guided by the passionate imaginative impulses of a human being. All of these themes which Polanyi carefully intertwines in the constructive philosophy presented in the first three parts of *Personal Knowledge* can be summarized by saying that knowledge is the product of responsible persons relying upon common belief; it is the achievement of living, historical articulate creatures.

The final section of *Personal Knowledge*, "Knowing and Being," attempts to set the understanding of man presented in the first three divisions in an evolutionary context. This section elaborates Polanyi's cosmology or his larger vision of the orders of being in the universe. Polanyi chose a discussion of evolution as the conclusion to his *magnum opus* because he recognized that his epistemological formulations are in direct contradiction with prevailing accounts of evolution; his argument analyzes the theory of natural selection and offers an alternative perspective which he conceives as a more logically coherent account of anthropogenesis. Polanyi's discussion sketches a hierarchical typology of human knowledge and a stratified evolutionary panorama. He argues that the tacit powers which he has presented as the basis of human activity can be seen at work in evolutionary emergence.

Polanyi's argument begins with the elaboration of a simple logical entailment of his basic distinction between the tacit and explicit components of knowing. Our understanding of a known entity acknowledges its comprehensive or molar character; corresponding to the tacit and explicit poles of knowing, a known object has a higher or comprehensive and a lower or particularized level of embodiment. This multi-level being possessed by a known object can be illustrated with the case of the machine. A machine has a level of being embodying operational principles and a level of physical-chemical constitution subject to physical-chemical description. The machine can be understood as a machine only in terms of its purpose which is embodied in its higher operational principles. These principles which Polanyi calls "rules of rightness" can account for the success of the machine, but its failures are analysable only in terms of causes understood in terms of its lower level of embodiment.

Polanyi extends this analysis of technical stratems which he designates "the logic of contrivance," by attempting to use it to conceptualize the structure of living forms. Animals in many ways resemble machines insofar as they use their bodies in machine-like ways in accordance with mechanical principles, but Polanyi argues that the originality of animals cannot be accounted for solely in terms of mechanical principles. Polanyi understands animals (at least higher ones) as using machinery which embodies fixed operational principles in the service of a center of individuality. The inventive capacities of the animal in adapting to new situations thus suggest that an animal is quite different than a machine; the higher level of embodiment in an animal is in its center of individuality while its mechanical capabilities belong to a lower level. The higher animals, Polanyi argues, must be recognized as initiators -- as centers of intelligent action -- deploying tacit powers.

Polanyi links the adaptive powers found in higher animals with the regenerative powers of lower organic life. He suggests that the morphogenetic principle which Driesch discovered in the sea urchin operates in essentially the same way at the level of structure as a higher animal in adapting its mechanical capacities to a new situation. Resourceful action in higher animals can thus be generalized to appear as a process of growth much like reproductive powers. Polanyi's argument has now moved from a discussion of the molar character of inanimate contrivances to the molar character of organic forms; he has posited a continuum among living forms suggesting that each member must be recognized as a centered initiator using lower levels of embodiment to promote resourceful action.

Polanyi further substantiates his contention that knowledge of life logically involves the recognition of a centered individual by analyzing the perspectives employed in the different sciences; he sketches out an increasingly personal ascending series of the sciences.

Natural sciences have only two levels, the level on which the observer stands and the level on which the studied subject matter exists, while biological and social sciences include a third, middle range level. To study an animal involves attributing to it an interpretative framework manifest in action; biological and social sciences thus include the recognition of a center of individuality in the subject matter. Polanyi extends this analysis by further distinguishing the social sciences from the biological sciences: as knowledge approaches the study of man, it becomes progressively more existential in meaning as it moves toward an exercise in mutuality.

The continuum of the sciences and the discussion of the molar character of entities, living and inanimate,which Polanyi has set forth suggest that his vision of the structure of the universe resembles a set of Chinese boxes; the universe is populated by a hierarchy of comprehensive entities each more encompassing than its constituents. Polanyi gives firmer lines to this image as he turns directly to an analysis of evolution. He regards the varied forms of life as the varied stages in a process of innovation producing progressively higher biotic achievements.

Polanyi rejects the Neo-Darwinian view of evolution as a logically inadequate reductionistic argument. It lacks a clear conception of how genetic changes produce a better equipped organism because it fails to acknowledge the uniqueness of a living form. Polanyi argues that a living form cannot be defined in terms of physics

XUM

and chemistry just as a machine cannot. He contends that living beings are morphological types which must be regarded as centers of individuality arising and operating through subsidiary potentialities. Biotic operations originated from inanimate origins, but inanimate matter can be regarded only as the accidental configuration which released life and a condition which sustains a stable open system. The ordering principle which originated life must be recognized as the potentiality of a stable open system. An open system cannot be described only in terms of the conditions which create and sustain it; the principle operative in the system itself must logically be recognized because the system has stability. It is in this sense that Polanyi insists on the recognition of a centered individuality in an analysis of living forms. The operational principle functioning in a stable system is a self-created achievement grounded in the potentiality of a subsidiary morphological field.

Polanyi employs the same logical argument used to account for the inanimate origin of life to account for morphological changes in time. Observable genetic variations are not clearly indicative of long-range evolutionary trends. The theory of natural selection wrongly accepts all mutations producing reproductive advantage as evidence of evolutionary progress. Random advantages do not add up to the evolution of a new set of operational principles. The combination of accidental mutations and natural selection are the conditions releasing and sustaining new operational principles but are not the

XUM

origin of such novelty. The action which generates the embodiment of a novel principle must logically be recognized as lying within the principle itself. Polanyi thus regards the re-shaping of a form of organization as a biotic achievement; an organism possesses unspecifiable powers which bring into being new forms.

The course of biotic achievement is for Polanyi the logic of emergence; it offers a coherent account of anthropogenesis. Successive biotic innovations have culminated at this stage in the concrete articulate personhood of man. This process has been a slow one which Polanyi sees as a process of maturation like that occurring in a child. The evolution of man as a process of ontogenetic maturation can be said to operate under self-set standards; it aims at a morphological rightness. In this respect, Polanyi compares evolution with his analysis of knowing operating under self-set standards aiming at an intellectual rightness. Knowing and being (*i.e.*, the evolution of forms) thus are for Polanyi at the conclusion of his *magnum opus* seen to employ similar powers on a common path. Human tacit powers employed in the search for understanding lead man into the unknown; the complex structure of the universe seems to beckon and guide man to its discovery. Living beings are at the same time involved in the process of realizing yet uncreated forms; they are guided by the potentiality for new individuation which their realization establishes.

CHAPTER IV

THE EXTENSION OF THE POST-CRITICAL PERSPECTIVE

Polanyi's thought after the publication of Personal Knowledge is to be represented here by his three major short works, The Study of Man, The Tacit Dimension and Meaning. The Study of Man is Polanyi's attempt to use his perspective to develop an analysis of historiography. The Tacit Dimension refines the analysis of tacit knowing presented in Personal Knowledge; it most clearly represents the late developments in Polanyi's epistemology. Meaning, written with the help of a collaborator, is a post-critical analysis of art, religion and myth; Polanyi has turned his attention late in life to these topics which he regards as encompassing forms of human meaning in order to affirm their integrity in an era he perceives as hypercritical. The discussion in this section will focus primarily on The Study of Man and The Tacit Dimension with only brief concluding comments on the general shape of Meaning. A detailed exposition and discussion of Polanyi's aesthetic thought drawn from Meaning follows in Division III.

SECTION A:

THE STUDY OF MAN

The Study of Man was published in the same year (1958) as the expanded version of Polanyi's Gifford Lectures (i.e., the published text of Personal Knowledge); it thus falls into what I have termed the middle period of Polanyi's philosophical development but should be regarded as a transitional work leading into its author's late work. Although it extends Polanyi's perspective to treat the problem of history, The Study of Man reflects no important developments in Polanyi's epistemology;[1] aside from the treatment of history, it is important primarily as the first condensed statement of Polanyi's mature thought after Personal Knowledge. As an essay on historiography, this short essay indicates the type of problems toward which Polanyi was turning after Personal Knowledge.

Polanyi's experience as a scientist provides the central metaphors and images through which he grasps problems and articulates his ideas. Yet, Polanyi is very eager to move outside the narrow situation of the scientist to demonstrate the cogency of his views. In the later phase of his life, problems such as history, aesthetics and ritual seem increasingly to take precedence over the problems of

---

[1] Smith, p. 97 maintains that in SM Polanyi has a clearer functional understanding of the subsidiary-focal distinction than in PK. He suggests that in PK Polanyi uses subsidiary to mean fully ineffable knowledge (i.e., knowledge completely unavailable to explicit attention as in the case of internal sensory-motor tacit components). I disagree with this view; I find indications (PK, pp. 62-63, p. 87ff) that Polanyi, even though he emphasizes this stronger sense of ineffability in places, also clearly understands his distinction as broader than this. My position is in keeping with Polanyi's suggestion (SM, p. 9) that SM might be read as an introduction to the more extensive PK.

XUM

convincing scientists and philosophers of the invalidity of positivistic inclinations.

The structure of The Study of Man is shaped with an eye to the particular agenda of the concluding chapter, the development of a theory of historiography. The sketch Polanyi draws of the constructive philosophy fully articulated in Personal Knowledge is from the outset designed to show that thought is man's highest achievement.[2] Even more than in Personal Knowledge, Polanyi here strives to show that affirmation of a personal knowledge does not denigrate knowledge making it subject to parochial impulses. He seems to recognize that his claim that responsible submission to strict standards internally held often appears an ambiguous criterion of excellence outside the scientific community with its well-defined parameters:

> I have said that the shaping of knowledge by the knower can lay claim to universal validity by submitting to a strict sense of responsibility But though this doctrine may satisfy us when applied to the domain of natural science, it meets with increasing difficulties when we pass on to the study of man acting responsibly within the bounds of his human obligations. Such studies seem to involve us in responsibilities which go far beyond those previously envisaged in recognizing the claims of a personal knowledge. For here we have to understand actions relating primarily to moral, possibly civic, or even religious obligations, and in doing so we shall exercise a judgment which is based in its turn on our own moral, civic or religious beliefs. But can we accredit an understanding shaped by our moral and civic responsibilities? We know how such responsibilities shade into political obligations, and how these in their turn form part of the established institutional framework, or else are merely the

---

[2] SM, p. 41, pp. 68-69.

XUM

> expression of political partisanship. Are we to subscribe then to a theory of knowledge which allows the shaping of knowledge to depend on such ephemeral and parochial impulses?[3]

The questions which Polanyi poses here are his central concern preliminary to any consideration of the problem of historical knowledge. But Polanyi has no doubt that his conception of a personal knowledge is broadly applicable in humanistic studies and the larger study of the life of man; responsible personal knowing does not degenerate into subservience of political ends:

> We must lay down the foundations once more, in such terms that we can develop from them a conception of human responsibility not liable to be misconstrued as subservience to politics or business.
>
> . . . If we are to vindicate human responsibility against the compulsions exercised by man's social setting, we shall have to establish first the existence of a human mind capable of making decisions of its own within a human body controlled by the laws of physics and chemistry.[4]

The defense of a responsible knowledge presented in The Study of Man is a familiar adaptation of some of the central ideas of Personal Knowledge. Polanyi believes that modern skeptical views of the possibility of human responsibility are spawned by the devastating impact which reductionistic thought has had upon man's appreciation for mental achievements. By attributing to thought its rightful significance, Polanyi holds that we come to see responsible personal knowing as both our heritage and as a viable path for the present and future.

---

[3] SM, p. 42.

[4] SM, p. 43.

Mind is, for Polanyi, a comprehensive attribute of man. The structure of mind must be understood as analogous to the description of a machine _qua_ machine in the evolutionary argument in the final division of _Personal Knowledge_. A machine has both a comprehensive upper level of reality -- that at which mechanical principles are embodied to achieve a given end -- and a lower level of reality -- that at which the elements of the machine function as subject to the laws of physics and chemistry. The upper level of reality is formed within the margin of possibilities defined by the specificity of the lower level. Mind is a comprehensive feature operating within and through the possibilities prescribed by innate and inherited physical and social-cultural features. To appreciate another mind requires an act of understanding, an act of dwelling in the particulars which conjointly constitute the person and his mind:

> I have said that the knowledge of a comprehensive entity is an understanding, an indwelling and an appreciation, and have indicated that these aspects of personal knowledge are closely interwoven. We can apply this now as follows. We acknowledge the sanity of another man's mind by paying respect to him. By this act of _appreciation_ we enter into a _fellowship_ with him and acknowledge that we share with him the same firmament of obligations. This is how we come to _understand_ it and accept it that he is a person capable of responsible choices.[5]

The achievements of mind can no more be faulted as inherently subservient to expedient ends than a machine can be criticized for operating within its physical and chemical limits. The machine or the person

---

[5] _SM_, pp. 65-66.

XUM

may not achieve success due to limitations or failures in its constitution or organization but there is no inherent reason to regard instances of failure as normative for all occasions of action. In Polanyi's view it is more logical to regard the physical and social components of personhood as concrete opportunties for mental achievement; like all opportunities, they include certain liabilities:

> The operational principles of a machine would guarantee invariable success to it, but for the fact that they can go into action only if embodied in tangible materials which carry in them always the possibility of failure. Human responsibility too is subject to a similar intrinsic limitation; it can operate only if embodied in human beings who are liable to failure. For no responsibility is taken where no hazard is to be met, and a hazard is a liability to failure. Moreover, while men are by nature subject to lust, pain, and pride, which makes them liable to dereliction of duty, these self-centered drives are indispensable elements of a responsible commitment. For only by staking our lower interests can we bear witness effectively to our higher purposes. Lastly, in all our mental achievements we rely ultimately on the machinery of our body, and this limits the scope and endangers the proper functions of our faculties. A breakdown of this machine may affect directly man's capacity for responsible choices, by rendering him pathologically feckless, apathetic or obsessed. Everywhere the potential operations of a higher level are actualized by their embodiment in lower levels which makes them liable to failure.[6]

In summary, for Polanyi, responsible human knowing is an ideal which, while clearly not fully realizable, is not impracticable.[7] The opportunities of a person's physical and social life create the possibility of responsible knowing just as much as they create the

---

[6] SM, p. 67.

[7] SM, p. 63.

XUM

liability of irresponsibility. Polanyi believes that the habits of society and particularly the university affirm in action the merit of continued faith in responsible knowing.

Those who do not share Polanyi's view of and faith in man will not be satisfied with this argument for the responsible potential of the individual knower as he stands embodied within a community. The rejection of belief in a truly objective knowledge appears to many necessarily to plunge man into a relativism. The fact that Polanyi's prelude to a theory of historiography in The Study of Man focuses again on his conception of responsibilty indicates its author's awareness that this will be a common criticism of his views. From within a Polanyian context, such a criticism appears indicative of a fundamental misunderstanding of Polanyi's post-critical project; it reflects a continued adherence to a bifurcated subject-object logic. In his recapitulation of his view of responsibility in the early sections of The Study of Man, Polanyi does not indulge in defensive arguments aimed at undercutting this obvious critique of his perspective. His is a constructive effort at conversion; he recognizes his affirmation of his own analysis of responsibility as consistent with the import of his argument:

> This conclusion, and the whole preceding analysis which leads up to it, can admittedly be affirmed only by someone who believes, as I do, in true mental achievements. To this extent my argument begs the question. But this is consistent with my purpose, which is only to show that as a

> result of accrediting within the framework of personal knowledge a belief in true mental achievements, we gain a view of man which confirms and strengthens this belief.[8]

The foregoing sketch has shown how Polanyi recasts some of the important ideas of earlier work into a framework in The Study of Man emphasizing the excellence of human mental achievement and the potential persons have to be responsible knowers. This framework prepares for the specific attention Polanyi devotes at the conclusion of The Study of Man to the problem of historiography. He argues that the study of man (*i.e.*, the writing of history specifically) is an endeavor continuous with man's other intellectual enterprises:

> The position at which I have arrived in the previous two lectures denies any discontinuity between the study of nature and the study of man. It claims that all knowledge rests on understanding, and that in this sense knowledge is of the same kind at all levels of existence. But this position admits, at the same time, that as the subject of our understanding ascends to higher levels of existence, it reveals ever new comprehensive features, the study of which requires ever new powers of understanding. I shall readily acknowledge, accordingly, that historians must exercise a special kind of understanding. But I shall argue also that all the distinctive characteristics of the historian's method emerge by continuous stages from the progressive modification of the methods used within science.[9]

The uniqueness of the historian's understanding grows out of the unique position of the subject he studies. Man as a thinking creature is, for Polanyi, the most comprehensive of entities subject to human

---

[8] SM, p. 66.

[9] SM, pp. 72-73.

XUM

investigation. To study an historical figure involves the most intense, personal and complex form of indwelling of a subject, a figure's human character. To understand a person living or dead is more of an encounter with an equal than an observational act. Great historical figures are profoundly unique and demand of the historian a kind of imaginative participation within the subject's life:

> Every pebble is unique, but profoundly unique objects are rare. Wherever these are found (whether in nature or among the members of human society) they are interesting in themselves. They offer opportunity for intimate indwelling and for a systematic study of their individuality. Since great men are more profoundly unique than any object in nature, they sustain a far more elaborate study of uniqueness than any natural object can. Hence the peculiar position of dramatic history at the end of a row of sciences of increasing intimacy and delicate complexity, yet offset against all of them by an exceptionally vigorous and subtle participation in its subject-matter.[10]

The historian's task is that of defining, as closely as possible through his own responsible attentiveness, the situation of a human mind engaged in actions recorded by history.[11] Polanyi holds that this is possible only by avoiding tendencies toward historicism (*i.e.*, fully resolving the subject into a reflection of his socio-political context thereby making the validity of all present value judgments about past action appear unwarranted), rationalism (*i.e.*, strictly applying present standards to judgments of past action and thereby fully ignoring the historical setting of action), and materialism (*i.e.*, viewing all action in history as determined by impulses of power and profit). Polanyi envisages the responsible historian as carefully threading a course between each of these abuses. The historian's consideration of his subject is one of balanced respect for the mental achievements of man:

---

[10] *SM*, p. 85.

[11] *SM*, p. 85.

> He will avoid then all three fallacies as follows: (1) the rationalist fallacy -- by admitting the indispensible biological and cultural rootedness of all free actions; (2) the relativist fallacy -- by acknowledging that each man has some measure of direct access to the standards of truth and rightness and must limit for their sake at some point his subjection to given circumstances, and (3) the determinist fallacy -- by committing himself to a personal knowledge of the human mind as a seat of responsible choices.[12]

The problems of historiography for Polanyi are not limited to issues surrounding a concern for balanced, responsible judgment of the historical figure. The situation of the historian is one similar to that of his subject. The historian operates within the physical and social context he is given. Such factors mark the limitations of the historical figure's availability. Yet, for Polanyi, the local rootedness of the historian does not point to the final impossibility of writing history but to the concrete opportunity which the historian has to achieve a responsible, personal appreciation of his subject.[13]

---

[12] SM, p. 89.

[13] In the opening chapters of SM, Polanyi tries to show that the concrete aspects of personhood provide both the opportunities as well as the liabilities of knowing; he extends this idea in his analysis of the historian. Polanyi's view is strikingly paralleled by Heidegger's suggestion in Being and Time, pp. 194-95:

XUM

The historian's task is to use his own socially and physically constituted faculties to discover the rationality of an historical figure's action. The historian respects the figure with whom he is concerned and strives to understand him in such a way that the figure emerges as a center of responsible judgment (pathological cases such as that of Tiberius or Hitler must be seen as instances of rationality impaired by causes operating at lower levels of operation within the person). Polanyi believes that often, particularly in the study of dramatic history, the historian's respect for his subject is transposed into a true reverence for the studied subject. The historical figure then becomes an ideal whose recognized standards become the criteria for the historian's self-evaluation:

> To contemplate a person as an ideal is to submit to his authority. The admirer of Napoleon does not judge him by independent previously established standards, but accepts,

---

In so far as the fact of this circle in understanding is not eliminated, historiology must then be resigned to less rigorous possibilities of knowing, Historiology is permitted to compensate for this defect to some extent through the "spiritual signification of its" objects. But even in the opinion of the historian himself, it would admittedly be more ideal if the circle could be avoided and if there remained the hope of creating some time a historiology which would be as independent of the standpoint of the observer as our knowledge of Nature is supposed to be.

But if we see this circle as a vicious one and look out for ways of avoiding it, even if we just "sense" it as an inevitable imperfection, then the act of understanding has been misunderstood from the ground up. . . . What is decisive is not to get out of the circle but to come into it in the right way. This circle of understanding is not an orbit in which any random kind of knowledge may move; it is the expression of the existential fore-structure of Dasein itself.

XUM

> on the contrary, the figure of Napoleon as a standard for judging himself. Such an admirer may be mistaken in the choice of his hero, but his relation to greatness is correct. We need reverence to perceive greatness, even as we need a telescope to observe spiral nebulae.[14]

For Polanyi, this final transition is not a perversion of the historian's task but a natural culmination of man's mental appreciation of the mental achievements of others. It is true that a study of an historical figure which culminates in an act of affiliation is a dangerous project. Corruption is a necessary liability of such affiliation. Polanyi chooses Napoleon for his discussion at this point specifically because he understands the idealization of Napoleon as bringing the excesses of recent history. Despite the liabilities of devotion to misguided masters, Polanyi believes that only by acts of affiliation with the ideals and standards of great historical personalities do cultures and communities receive their norms, values, and destiny:

> This choice must indeed ultimately fall back on us, since no authority can teach us how to choose between itself and its rivals. We must enter here on an ultimate commitment which coincides essentially with the act of deciding to what extent we should accept as given the social and mental milieu within which we shall deploy our own thoughts and feelings. By recognizing our heroes and masters, we accept our particular calling.[15]

In summary, The Study of Man, in terms of Polanyi's philosophical development, reflects chiefly a consolidation and simplification of the perspective of Personal Knowledge. As an essay on historiography, it applies to a specific problem and somewhat extends Polanyi's ideas about tradition, the fiduciary structure of knowledge, the hierarchy of complexity of the intellectual disciplines, and the responsible personal character of knowing. Understanding history is essentially a problem of understanding another mind for Polanyi; the writing of history is an attempt to discover the rationality of the historical figure as a seat of responsible judgment engaging in action. Polanyi's emphasis on the balanced rational approach needed in historical analysis parallels his emphasis on rationality in his application of his epistemological apparatus to another area, his study of evolution at the conclusion of Personal Knowledge. His treatment of evolution, like his treatment of historiography, is essentially a call for a more rational logically consistent perspective. The attempt to address the problem of historiography indicates both the gradual shift in Polanyi's interests away from the problem of rethinking the foundations of science and his belief in the positive value of his epistemological ideas applied to problems in humanistic studies. At the beginning of the last chapter, I suggested that Polanyi's philosophical ideas might be understood as knitting together a communal and an existential understanding of man. Early writing such as Science, Faith and Society show how Polanyi sees man's potential to become a responsible qualified specialist like the scientist in terms of his interaction with and trust in his peers and masters. This is a thread that continues and is generalized in the epistemological perspective of Personal Knowledge. Again, in The Study of Man Polanyi analyzes man and his potential for mental achievements in terms of his physical and social groundedness. Yet, by the time of this writing, it is very clear that for Polanyi the social character of knowing cannot be separated from the existential aspects of human life. The use of the body is Polanyi's model for his theory of tacit knowing and the concreteness of the physical body and social experience are the opportunities for man's achievements. A person's physical and social embodiment defines the person's calling. This idea is not new in The Study of Man, but it emerges forcefully here because Polanyi focuses in early chapters directly on the problem of responsibility. The tendency to emphasize the embodied nature of knowing seen in The Study of Man becomes even more pronounced in The Tacit Dimension.

---

[14] SM, p. 96.

[15] SM, p. 98.

SECTION B:

THE TACIT DIMENSION

The Tacit Dimension, published in 1966, was originally the Terry Lectures (Yale University) of 1962. In the intervening three years between the lecture and the published version, Polanyi revised and expanded his ideas. He indicates that this delay was also occasioned by his own effort closely to re-examine his thought and be sure that the turn taken in the Terry Lectures was justified.[16] He notes that two further developments in his ideas caused some anxiety:

> It took me three years to feel assured that my reply to the *Meno* in the Terry Lectures was right. This has at last been cleared up to my satisfaction. . . . It appears now also that what I have said in the Terry Lectures about our capacity for seeing and pursuing problems had been said long ago in *Science, Faith and Society*. Besides, my hesitant suggestion in the Terry Lectures that tacit knowing is the way in which we are aware of neural processes in terms of perceived objects has been consolidated.[17]

Both of these new developments reflect the expanded understanding of the structure of tacit knowing emerging in *The Tacit Dimension*. Polanyi recognized this subtle shift in his thought and compared the writing of his middle period to his late outlook as follows:

> Viewing the content of these pages from the position reached in *Personal Knowledge* and *The Study of Man* eight years ago, I see that my reliance on the necessity of commitment has been reduced by working out the structure of tacit knowing. This structure shows that all thought contains components of which we are subsidiarily aware in the focal content of our thinking, and that all thought dwells in its subsidiaries, as if they were parts of our body. Hence thinking is not only necessarily intentional, as Bretano has taught: it is also necessarily fraught with the roots that it embodies. It has a *from-to* structure.[18]

The following discussion of *The Tacit Dimension* treats three dimensions of Polanyi's perspective which appear in a new light in this late volume. Most important is the deeper understanding of the structure of tacit knowing which Polanyi acknowledges. His view of human knowing now strongly emphasizes the bodily and the existential; the scope of tacit knowing as mirrored by Polanyi's treatment of the problem of the *Meno* and his analysis of neural processes is presented with expanded horizons. Also important in *The Tacit Dimension* is the clearer understanding Polanyi seems to have of the ontological aspect of tacit knowing. The final section of *Personal Knowledge* attempted to link knowing and being but it is really only in the discussion of *The Tacit Dimension* that this linkage is made plain. Finally, *The Tacit Dimension* also presents a simpler and more direct treatment of Polanyi's vision of the universe and analysis of evolution.

---

[16] *TD*, ix.

[17] *TD*, ix-x.

[18] *TD*, x.

The opening chapter of *The Tacit Dimension*, entitled "Tacit Knowing," is Polanyi's account of how man uses his tacit powers. Here Polanyi shows that the whole range of responsive human activity -- from a purely bodily response to articulate knowing -- can be understood as a manifestation of man's active shaping of experience. Polanyi suggests initially that all instances of human knowing should be considered in terms of a modified Gestalt model of perception:

> . . . I am looking at Gestalt . . . as the outcome of an active shaping of experience performed in the pursuit of knowledge. This shaping or integrating I hold to be the great and indispensable tacit power by which all knowledge is discovered and, once discovered, is held to be true. The structure of Gestalt is then recast into a logic of tacit thought. . . .[19]

---

[19] *TD*, p. 6.

XUM

All intentional human activities, because they involve an active co-ordination of elements toward a desired end, may be said to conform to the "logic of tacit thought."[20] Highly creative conceptual integrations involved in feats of scientific and artistic genius now appear as the most sophisticated instances of intentionality. The art of the diagnostician, as a somewhat impoverished form of discovery, can be classed with the performance of artistic, athletic and technical skills as a median range example of intentional activity. Perception may be viewed as a form of tacit knowing which represents a still-lower range of intentionality; perception forms a bridge between the higher powers of man and bodily processes which are in only the vaguest sense controlled by man. But even these subliminal bodily processes can be understood as conforming to the "logic of tacit thought" insofar as they involve an active integration of particulars to produce a certain response. Psychological experiments on "subception" show that a person presented with a large number of nonsense syllables can "learn" to anticipate a shock after certain syllables without being able to identify the "shock syllables."[21] A person's body shows symptoms of anticipating the shock, although the person remains cognitively unaware of the signs which key the anticipation. According to the structure of tacit knowing (*i.e.*, integrating and recognizing tacitly held particulars only in the appearance of the distal objective) the person "knows" the

---

[20] *TD*, p. 6.

[21] *TD*, p. 7.

"shock syllables" only in terms of his bodily anticipations of a shock. Purely bodily responses though subliminal can thus for Polanyi be viewed, like exterior intentional human activities, as an active integration of particulars. Internal subliminal processes can also be considered as tacit components of external intentional activities. Such tacit components have their meaning in terms of the outside experience or performance to which a person is attending. It is in this sense that Polanyi includes neural processes (of which we are aware only in terms of their meaning in perceived objects) as conforming to the logic of tacit knowing. Polanyi thus concludes in a much broader fashion in The Tacit Dimension than in earlier writing that all human activities, whether external and intentional or more fully internal, are a part of the from-to process of tacit knowing. Tacitly known particulars are actively coordinated and have their joint meaning only in the image, knowledge or performance on which they bear. Because tacitly known elements are focally unrecognized in themselves and yet provide the ground that makes explicit knowledge or performance possible, it is appropriate to say that man always knows more than he can say.

Polanyi's view of tacit knowing is a description applicable to the whole range of human experience. He expands his conception of how man exercises his tacit powers along the line first developed in Personal Knowledge and The Study of Man; man is a skillful tool user and the human body is the person's ultimate instrument for providing external knowledge. Man normally knows his body tacitly as he deploys it to attend to matters of concern outside himself:

> Our body is the ultimate instrument of all our external knowledge, whether intellectual or practical. In all our waking moments we are relying on our awareness of contacts of our body with things outside for attending to these things. Our own body is the only thing in the world which we normally never experience as an object, but experience always in terms of the world to which we are attending from our body. It is by making this intelligent use of our body that we feel it to be our body, and not a thing outside.[22]

All tools, physical and mental, function like the body as tacit components through which we realize an end. All man's knowing is thus bodily in form; we pour ourselves into our tools, our tacit components, in order to understand and respond to the world. It is by dwelling in or interiorizing particulars that man comprehends their joint significance:

> The identification of tacit knowing with indwelling involves a shift of emphasis in our conception of tacit knowing. We had envisaged tacit knowing in the first place as a way to know more than we can tell. We identified the two terms of tacit knowing, the proximal and the distal, and recognized the way we attend from the first to the second, thus achieving an integration of particulars to a coherent entity to which we are attending. Since we were not attending to the particulars in themselves, we could not identify them; but if we now regard the integration of particulars as an interiorization, it takes on a more positive character. It now becomes a means of making

---

[22] TD, p. 16.

> things function as the proximal terms of tacit knowing, so that instead of observing them in themselves, we may be aware of them in their bearing on the comprehensive entity which they constitute. It brings home to us that it is not by looking at things, but by dwelling in them, that we understand their joint meaning.[23]

An unbridled lucidity can destroy a meaningful whole and kill its appreciation; its unity can be restored only by again interiorizing the particulars and tacitly integrating them. Often the combination of an analytical dismembering of a whole followed by its re-unification can provide a deeper, more secure meaning for the whole. But Polanyi views analytical ideas suggesting that more tangible particulars offer a truer conception of things as fundamentally mistaken. Likewise, the tendency to regard an explicit integration as both more legitimate and as a model for knowing is wrong. Polanyi stresses that not all integrations can be made explicit; to make any integration explicit simply shifts the tacit dimensions of the act of knowing to another level:

> But my examples show clearly that, in general, an explicit integration cannot replace its tacit counterpart. The skill of a driver cannot be replaced by a thorough schooling in the theory of the motorcar; the knowledge I have of my own body differs altogether from the knowledge of its physiology; and the rules of rhyming and prosody do not tell me what a poem told, without any knowledge of its rules.[24]

The logic of tacit knowing gives an account of meaning which denies that detached, objective knowledge is possible. Polanyi regards the ideal of objectivity as a misplaced ideal; a complete formalization of knowledge is self-contradictory. To emphasize that even within science a complete formalization of knowledge is impossible, Polanyi analyzes the genesis of scientific discovery, the seeing and shaping of a problem. The Meno poses the issue of problem solving in its classic form.[25] Plato pointed out that it appears to be contradictory to attempt to set up a search for something that is truly unknown:

---

[23] TD, p. 18.

[24] TD, p. 20.

> Meno: But how will you look for something when you don't in the least know what it is? How on earth are you going to set up something you don't know as the object of your search? To put it another way, even if you come right up against it, how will you know that what you have found is the thing you didn't know?
> Socrates: I know what you mean. You realize that what you are bringing up is the trick argument that a man cannot try to discover either what he knows or what he does not know? He would not seek what he knows, for since he knows it there is no need of the inquiry, nor what he does not know, for in that case he does not even know what he is to look for.[26]

Polanyi argues that Meno's problem would indeed be a serious logical connundrum if all knowledge were explicit.[27] But if Plato's problem is understood in terms of the theory of tacit knowing, the Meno serves as a demonstration that man knows more than he can say:

---

[25] Marjorie Grene (p. 23) points out that for Polanyi the problem of the Meno is the root problem for epistemology. The paradigm case of knowledge in our culture is science and the paradigm of science is discovery.

[26] Plato, Meno, 80 d-e.

[27] Polanyi's solution to the problem of the Meno begins with the assumption that there is learning and discovery. With this as a given the problem of epistemology then becomes how to abandon the search for a wholly explicit, wholly impersonal knowledge. (See Grene, p. 33.)

> The kind of tacit knowledge that solves the paradox of the *Meno* consists in the intimation of something hidden, which we may yet discover. There exists another important manifestation of these mental powers. We are often told that great scientific discoveries are marked by their fruitfulness; and this is true. But how can we recognize truth by its fruitfulness? Can we recognize that a statement is true by appreciating the wealth of its yet undiscovered consequences? This would of course be nonsensical, if we had to know explicitly what was yet undiscovered. But it makes sense if we admit that we can have a tacit foreknowledge of yet undiscovered things. This is indeed the kind of foreknowledge the Copernicans must have meant to affirm when they passionately maintained, against heavy pressure, during one hundred and forty years before Newton proved the point, that the heliocentric theory was not merely a convenient way of computing the paths of planets, but was really true.[28]

The shaping of a problem and the pursuit of discovery in science are for Polanyi always predicated upon an intuited reality seen as emerging:

> The pursuit of discovery is conducted from the start in these terms; all the time we are guided by sensing the presence of a hidden reality toward which our clues are pointing; and the discovery which terminates and satisfied this pursuit is still sustained by the same vision. It claims to have made contact with reality: a reality which, being real, may yet reveal itself to future eyes in an indefinite range of unexpected manifestations.[29]

Within the theory of tacit knowing, truth must be conceived in terms its proleptic character:

> It appears, then, that to know that a statement is true is to know more than we can tell and that hence, when a discovery solves a problem, it is itself fraught with further intimations of an indeterminate range, and that furthermore, when we accept the discovery as true, we commit ourselves to

---

[28] *TD*, pp. 22-23.

[29] *TD*, p. 24.

XUM

> a belief in all these as yet undisclosed, perhaps as yet unthinkable, consequences.[30]

The problem of the Meno is resolved by recognizing man's tacit powers. Man grasps his problems and their solution by pouring himself into their particulars. By dwelling in a problem we become committed to a reality whose implications may remain largely concealed:

> Such indeterminate commitments are necessarily involved in any act of knowing based on indwelling. For such an act relies on interiorizing particulars to which we are not attending and which, therefore, we may not be able to specify, and relies further on our attending from these unspecifiable particulars to a comprehensive entity connecting them in a way we cannot define. This kind of knowing solves the paradox of the Meno by making it possible for us to know something so indeterminate as a problem or a hunch, but when the use of this faculty turns out to be an indispensable element of all knowing, we are forced to conclude that all knowledge is of the same kind as the knowledge of a problem.[31]

The foregoing discussion has shown the expanded horizons Polanyi attributes to tacit knowing in The Tacit Dimension; this is one major development of his late thought. Polanyi's clarification of the ontological aspect of tacit knowing and his use of this aspect to distill his vision of the universe are other important developments in The Tacit Dimension. At the beginning of The Tacit Dimension, Polanyi discusses the structure of knowing in a more consolidated and systematic fashion than in earlier work. He treats four central structural aspects of tacit knowing which he labels the functional, the phenomenal, the semantic and the ontological structures of tacit knowing.[32] The first three of these aspects of tacit knowing have already been discussed under other names and will be reviewed in the next chapter. Polanyi's treatment of the ontological aspect of tacit knowing is especially important because it is his clearest treatment of the link he posits between knowing and being.

---

[30] TD, p. 23.

[31] TD, p. 24.

Polanyi extends his paradigm for knowing to include an ontological referent or foundation of comprehension. He has described knowing as an act of dwelling in the particulars of an entity and integrating them into a coherent whole. The human body and tools assimilated to it are the tacit components through which man orients himself in the world:

> Because our body is involved in the perception of objects it participates thereby in our knowing of all other things outside. Moreover, we keep expanding our body into the world, by assimilating to it sets of particulars which we integrate into reasonable entities. Thus do we form, intellectually and practically, an interpreted universe populated by entities, the particulars of which we have interiorized for the sake of comprehending their meaning in the shape of coherent entities.[33]

The entities which man comes to understand in his integrations range from simple physical objects to complex comprehensive entities such as persons and problems; it is not the tangibility of entities but their intuited power for indeterminate manifestations which marks the reality of entities:

---

[32] _TD_, pp. 10-13.

[33] _TD_, p. 29.

XUM

> This capacity of a thing to reveal itself in unexpected ways in the future I attribute to the fact that the thing observed is an aspect of a reality, possessing a significance that is not exhausted by our conception of any single aspect to it. To trust that a thing we know is real is, in this sense, to feel that it has independence and power for manifesting itself in yet unthought of ways in the future. I shall say, accordingly, that minds and problems possess a deeper reality than cobblestones, although cobblestones are admittedly more real in the sense of being tangible. And since I regard the significance of a thing as more important than its tangibility, I shall say that minds and problems are more real than cobblestones. This is to class our knowledge of reality with the kind of foreknowledge which guides scientists to discovery.[34]

To understand another mind is for Polanyi the most challenging and rewarding of man's intellectual pursuits. Another mind is appreciated not by looking at its manifestations but by dwelling in such manifestations in order to appreciate the personal center of intelligent action from which they issue. The understanding of another person is the comprehension of a real entity whose manifestations remain forever indeterminant. When we understand another person we grasp the structure of his being:

> . . . man's skillful exercise of his body is a real entity that another person can know, and know only by comprehending it, and that the comprehension of this real entity has the same structure as the entity which is its object.[35]

More generally, whatever entities we understand Polanyi claims we make an ontological reference to:

---

[34] TD, pp. 32-33.

[35] TD, p. 33.

XUM

> . . . what it is that we know by understanding a comprehensive entity, makes an ontological reference to it. We have now given a solid content to this hitherto rather vague ontology. We have shown that the kind of comprehensive entities exemplified by skillful human performances are real things; as real as cobblestones and, in view of their far greater independence and power, much more real than cobblestones. It seems plausible then to assume in all other instances of tacit knowing the correspondence between the structure of comprehension and the structure of the comprehensive entity which is its object. And we would expect then to find the structure of tacit knowing duplicated in the principles which account for the stability and effectiveness of all real comprehensive entities.[36]

What we understand or know can for Polanyi be equated with the being of an entity. A further correspondence between the operation of a known being and the structure of comprehension can be set forth. According to the theory of tacit knowing, the understanding of a coherent entity relies upon a tacit awareness of the particulars of the entity for attending to it. To switch attention to the particulars as entities in themselves cancels their function as particulars and makes the subject lose sight of the whole which a tacit appreciation of the particulars makes possible. Corresponding to these two aspects of tacit knowing are two ontological counterparts:

> The ontological counterpart of this would be (1) that the principles controlling a comprehensive entity would be found to rely for their operations on laws governing the particulars of the entity in themselves; and (2) at the same time the laws governing the particulars in themselves would never account for the organizing principles of a higher entity which they form. . . . The playing of a game of chess is an entity controlled by principles which rely on

---

[36] TD, pp. 33-34.

> the observance of the rules of chess; but the principles controlling the game cannot be derived from the rules of chess. The two terms of tacit knowing, the proximal, which includes the particulars, and the distal, which is their comprehensive meaning, would then be seen as two levels of reality, controlled by distinctive principles. The upper one relies for its operations on the laws governing the elements of the lower one in themselves, but these operations of it are not explicable by the laws of the lower level. And we could say that between two such levels a logical relation holds, which corresponds to the fact that the two levels are the two terms of an act of tacit knowing which jointly comprehends them.[37]

Polanyi uses his two-level conception of beings to project an image of the universe populated with comprehensive entities which meaningfully unite realities of higher and lower strata:

> I have spoken before of the way we interiorize bits of the universe, and thus populate it with comprehensive entities. This program which I have set out now would change this panorama into a picture of a universe filled with strata of realities, joined together meaningfully in pairs of higher and lower strata.[38]

Polanyi gives a firmer outline to this hierarchical vision of the orders of being in his analysis of evolution. Man and other living beings can be viewed as a hierarchy of increasingly complex operational levels. Each level is meaningfully joined with that below it; every level operates within the boundary conditions left open by the lower level. The logical structure of this conjunction of higher and lower "implies that a higher level can come into existence only through a process not manifest in the lower level, a process which thus qualifies

---

[37] TD, pp. 34-35.

[38] TD, p. 35.

XUM

as emergence."[39] Man can thus be viewed as a history of the process of evolutionary emergence; he represents a sequence of the strata of reality which is operationally and meaningfully united and has over time reached the complex stage of the present:

> The sequence of these levels is built up by the rise of higher forms of life from lower ones. We can see all the levels of evolution at a glance in an individual human being. The most primitive form of life is represented by the growth of the typical human shape, through the process of morphogenesis studied by embryology. Next we have the vegetative functioning of the organism, studied by physiology; and above it there is sentience, rising to perception and to a centrally controlled motoric activity, both of which still belong to the subject of physiology. We rise beyond this at the level of conscious behavior and intellectual action, studied by ethnology and psychology; and, uppermost, we meet with man's moral sense, guided by the firmament of his standards.[40]

Every level of the hierarchy of operational systems constituting man relies on the limits and possibilities of matter described by the laws of physics and chemistry, but the organizational principles are not determined by the laws of nature. The dominating principle of each system is shaped in the margin left open by natural laws and the principles governing lower systems. Each more complex system relies on the principles governing its subsidiary systems but is not determined by them:

> Moreover, each lower level imposes restrictions on the one above it, even as the laws of inanimate nature restrict the practicability of conceivable machines; and again, we

---

[40] TD, pp. 35-36.

XUM

> may observe that a higher operation may fail when the next lower operation escapes from its control. Words are drowned in a flow of random sound, sentences, in a series of random words, and so on.
>
> In a broad way we can see this principle of marginal control operating also in the hierarchy of biotic levels. The vegetative system, sustaining life at rest, leaves open the possibilities of bodily movement by means of muscular action, and the principles of muscular action leave open their integration to innate patterns of behavior. Such patterns leave open, once more, their shaping by intelligence, the working of which offers, in its turn, wide-ranging possibilities for the exercise of still higher principles in those of us who possess them.[41]

In conclusion, Polanyi's evolutionary treatment of man views man in his role as a potentially responsible knowing creature as the present but not necessarily the last stage of evolutionary emergence.[42]

In summary, The Tacit Dimension is a succinct, mature statement of the philosophical inquiry begun by Polanyi in the forties. In relation to earlier work, The Tacit Dimension presents an expanded view of human use of tacit powers. Polanyi's discussion of the problem of

---

[41] TD, p. 41.

[42] It is clear that Polanyi understands evolution in terms of the tacit powers he believes are shared by all life. An act of emergence is accomplished by putting together particulars in order to create a level of organization which transcends the level at which particulars operate in themselves. It is by the same logic of tacit integration extended by symbolic representation that Polanyi understands human knowing. In both PK and TD Polanyi carefully draws the parallel between knowing and the transformation of being. Polanyi's perspective is at least close to the suggestion by Peirce and Meade that science might be considered as self-conscious evolution. See especially Charles S. Peirce, "The Fixation of Belief," Philosophical Writings of Peirce, ed. Justus Buchler (N.Y.: Dover, 1955), pp. 5-22; and George Herbert Mead, "Evolution Becomes a General Idea," and "The Problem of Society -- How We Become Selves," On Social Psychology, ed. Anselm Strauss (Chicago: University of Chicago, 1964), pp. 3-44.

XUM

the Meno and his treatment of internal bodily functions show how he now believes all human activity may be seen in terms of the from-to structure of tacit knowing. The emphasis in The Tacit Dimension upon the element of indwelling and the bodiliness of all knowledge reflects Polanyi's increasing stress upon the existential character of human knowing. Polanyi sees all human thought as guided by its subsidiaries. The commitment undergirding a personal knowledge is now seen less as a function of self-conscious intent (as in Personal Knowledge and The Study of Man where the theme of responsibility is developed as a specific problem) than a result of the bodily mode of human activity; to a large extent, Polanyi believes we arrive at our knowledge already committed to it. The emphasis upon the existential implications of tacit knowing found in The Tacit Dimension remain tied to Polanyi's earlier emphasis on the social and fiduciary character of knowing; knowing is always a function of life in a community with common values and purposes. The Tacit Dimension also presents a clearer statement of the ontological implications of knowing and the stratified, evolutionary vision of the universe than Polanyi had earlier worked out. For Polanyi the comprehension of an entity reveals the structure of the entity's being. An entity consists of an upper stratum of reality operating in the margin left undetermined by its lower subsidiary strata. Man, as a product of evolutionary emergence, can be understood as a complex sequence of meaningfully united strata of reality. Evolution is the process by which the lower level of particulars in any given organic operational system release the organizing principle which transforms the capabilities of the system. In this sense, it is possible for Polanyi to view responsible human knowing as the highest achievement of man, the creature who represents the highest present stage of evolutionary emergence.

SECTION C:

MEANING

Since the publication of *The Tacit Dimension* in 1966, Polanyi has written a number of short articles and delivered several lecture series.[43] Much of the substance of this material has been integrated and consolidated in Polanyi's last book, *Meaning*, written with the help of the American philosopher Harry Prosch. In terms of Polanyi's philosophical odyssey, *Meaning* is an important work because it reflects a final development in its author's perspective. This work is a study of the kind of meaning achieved in metaphors, poetry, art, ritual, myth, and religion. Here I shall discuss only the broad outlines of Polanyi's views; later chapters treat in detail Polanyi's

---

[43] I omit from direct consideration here the collection of essays of Polanyi, *Knowing and Being*, edited by Marjorie Grene (Chicago: University of Chicago Press, 1969; cited hereafter as KB). Many of these essays were published before *TD*; the collection as a whole is a very fine selection representing the scope of Polanyi's thought. Complete bibliographic information for the post-*TD* work has not to my knowledge been collected in one place. *KB* has five essays from the period after 1966; the bibliography at the end of *TD* (pp. 103-04) lists several other late selections; *Meaning*, pp. 227-28 lists essays which were sources for its chapters.

XUM

analysis of art which is the foundation of his treatment of each of the topics mentioned above.

Meaning is Polanyi's attempt to use and expand the perspective of his philosophy to understand the structure and value of certain meaningful forms, those of art, myth, and religion, which he believes are endangered in the modern world. Polanyi contends that the modern mind has excelled in destroying all forms of human meaning; he understands his own work as an effort at exposing the false presuppositions grounding much modern thought and as a constructive attempt to prepare the way for a possible restoration of meaning through the development of the notion of personal knowledge.[44] In analyzing the kind of meaning of art, myth and religion, Polanyi thus hopes to show that there is continuity between the kinds of meaning he has earlier claimed for science and the meaning found and studied in humanistic enterprises.

The movement of Polanyi's interest toward this new concern is not, in fact, startlingly new. As exhibited by Polanyi's treatment of themes such as conviviality, his discussion of the Azande and his occasional references to art in *Personal Knowledge*, earlier writing frequently treated matters of art and religion indirectly. In turning directly to these topics and the problem of meaning more generally, Polanyi is actually only shifting his approach to the problem of knowledge by ninety degrees; to treat the problem of meaning and its structure in certain special forms Polanyi is, in a general sense, drawing out what in The Tacit Dimension he called the "semantic aspect of tacit knowing."[45] Polanyi's interest in expanding the theory of tacit knowing to treat art and religion is in line with the more general shift after Personal Knowledge away from a focus on the reinterpretation of science.

---

[44] *M*, ix-x.

The general structure of Meaning proceeds from an account of the destruction of meaning through the inclinations of the modern mind to an analysis of the structure and availability of meaning in science, art, myth, and religion to a concluding discussion of the necessary structure of a society open to the pursuit of meaning in any of the forms studied. The book thus moves from a discussion of the destruction of meaning to its restoration, from an analysis of the derogation of freedom to the possibility of its nurture. Polanyi's analysis of modern consciousness as a combination of hypercritical tendencies and excessive moral passion is already a familiar feature of much of his earlier writing and has been treated in discussion of this work. Similarly, the discussion of science and the structure of knowing is a condensed, well-articulated summary of ideas that have gradually emerged in the work from Science, Faith and Society to The Tacit Dimension. Polanyi's concluding discussion of order, mutual authority, and the structure of a free society also return to conceptions which have often been elaborated in earlier work. The chapter entitled "Order" is an exceptionally fine restatement of the vision of the universe which appeared in The Tacit Dimension and in the fourth section of Personal Knowledge. Polanyi reworks his analysis of evolution and links organismic and heuristic development in an image of the meaningfulness of the world:

---

[45] TD, pp. 12-13.

> The notion of a gradient sloping in the direction of the minimization of potential energy, as we have spelled it out above, can also be used as a model for describing the efforts of human thought. When one sees a problem and undertakes its pursuit, one sees a range of potentialities for meaning which one thinks are accessible.[46]
>
> If we believe in the existence of a general movement toward the attainment of meaning in the universe, then we will not regard any of the kinds of meaning achieved by men to be merely subjective or private -- to be only a sort of epiphenomenal form floating to the surface, a mere by-product of the real interactions that go on in the world, as the Marxists have taught. We will, on the contrary, regard every achievement of any sort of meaning as the epitome of reality, for we will think it is the sort of thing that the world is organized to bring about.[47]

The concluding two chapters of Meaning moves from this image to a discussion of the role of authority and structure in promoting a society free to pursue meaning in its various forms. In these concluding remarks, Polanyi repeats some of the things he has said in other works about the traditional and fiduciary structure of knowledge and components of an open society which will respect and nurture the meaning achievements of man.

---

[46] M, p. 176.

[47] M, p. 182.

The authentically new ideas in Meaning are found in Polanyi's attempt to expand the theory of tacit knowing to analyze the structure of the meanings found in art, myth, and religion. Polanyi's treatment begins with a discussion of symbol, metaphor, and art which he then extends to the cases of myth and religion. The theory of tacit knowing argues that an act of understanding involves a tacit integration of particulars. When a person dwells in particulars, he sees their meaning in terms of that to which they point. The meaning of the blind man's muscular coordination and grasp on a probe as he feels a space is in terms of the understanding of the location of objects within the space. Meaning is displaced away from the subject. As Polanyi turned to symbol, metaphor, and art, he began to re-think this general view of the relationship between particulars and a focus in the act of knowing. In Meaning Polanyi has come to speak more about the imagination in promoting and sustaining tacit integrations. He argues that it is the imagination of a subject that implements and sustains all meaning; but this is particularly the case with the meaning found in art, myth, and religion. Polanyi now distinguishes between two general classes of meaning. He calls ordinary meanings ranging from those of perception to those of scientific study natural meanings; they are produced by self-centered integrations in which the focal pole of the integration alone is of significance. Such natural or indicative meanings (i.e., meanings produced in an integration which flows directly from tacit particulars to focal whole) are for Polanyi quite different from the class of transnatural meanings found in art, myth, and religion. Self-giving integrations produce transnatural meaning; a self-giving integration is a tacit integration which lacks the vectoral character of indicative integrations and involves the knowing subject in his perceptions in a deeply existential manner. To clarify further the nature of transnatural meanings Polanyi's discussion of symbol, metaphor, and art must be considered.

Integrations which attend to symbols can be clearly distinguished from indicative integrations. While the locus of interest in an indicative integration is the focus, it is the subsidiaries of a symbol which are more important than the object attended to as a natural object. A flag is understood not as a piece of cloth but as an emblem representing a country. Polanyi argues that the flag succeeds in having this significance because the subsidiaries through which a person attends to the colored cloth, awareness of membership in a certain group, is the most important component of the integration; such subsidiaries become invested in the natural object. The symbol has power or takes on this transnatural significance because the perceiver opens himself to this possibility and allows himself to be "carried away."[48] In "surrendering"[49] to the flag, the flag comes to embody that attended from in attending to its meaning. Symbolization and indication are thus for Polanyi quite different operations. Symbolization has its locus of interest in particulars which become embodied in a focus; this directly involves the subject. Indication is a vectoral integration with its locus of interest at the focus; the subject is involved in shaping meaning but his participation lacks the direct felt quality of symbolization.

---

[48] M, p. 73.

[49] M, p. 73.

Polanyi expands his analysis of symbols to account for the metaphor and the work of art. A metaphor embodies a tenor in a vehicle. The tenor is a context of meaning held subsidiarily which has a certain interest and becomes embodied in a figure which has its own intrinsic interest. The integration which understands a metaphor is in a sense a hybrid of indication and symbolization since it involves two centers of interest. Like the symbol, the metaphor deeply involves those who understand it. We surrender to the metaphor a part of our own diffuse experience which, in functioning subsidiarily, is embodied in the terms of the metaphor as they relate to each other. Polanyi understands the work of art along lines akin to his view of the metaphor. The work of art has several centers of interest such as the rhythm, rhyme, and other formal features of the poem (*i.e.*, such features become formal when focused on in themselves); these are tacitly integrated into a whole which is the meaning of the poem *qua* poem. Features such as rhythm and rhyme set poetic speech off from ordinary language use; they provide a frame effect to the expressive act. When considered in themselves, the elements composing the frame and the "content" of a statement seem incompatible. This is seen more clearly in the case of the flat canvas and brushstrokes and the apparent perspective of a normal painting.

To grasp the transnatural meaning of the painting, a flat canvas with depth or a picture, the perceiver must integrate these incompatible particulars. The work of art is thus, for Polanyi, an integration of incompatibles. The incompatible particulars also serve to detach the transnatural meaning of an artificial coherence from its creator, its audience and the realm of every-day response; it establishes the work with a kind of reality of its own which is to be enjoyed in itself. Like the metaphor, the work of art deeply moves its perceivers. Diffuse elements of the perceiver's life related to the work's subject matter are subsidiaries of the perceptive act which become unified and embodied in the artistic form.

Polanyi's treatment of the kind of meaning found in myth, ritual, and religion is built upon his analysis of art as an integration of incompatible particulars. Mythic, ritualistic, and religious meanings are also transnatural meanings available only by imaginative integrations of components not normally seen as coherent. The recital of a myth is an experience which detaches the person from every-day concerns just as the frame of a work of art moves the reader into a new sphere:

> What happens when we accept a myth is what happens when we listen to great poetry or a great play or view a great painting; we are overcome by it and carried away into its own sphere, away from the sphere in which we lived a moment ago and to which we shall presently return.[50]

---

[50] M, p. 124.

XUM

Mythic and religious forms have their incompatibility in their reference to strange conceptions outside of our experience in which we are nevertheless asked, through imagination, to believe. With these conceptions myths attempt to speak of the entire universe and human destiny; this breadth makes religious conceptions differ from art in that they become mystical and sacred:

> Religious conceptions like the myth of creation are, however, different in significant ways from the transnatural achievements of poetry and art. The way these religious conceptions speak of the entire universe and of our destiny as human beings within these boundless perspectives makes them mystical by contrast with the concepts of poetry and art; it also makes them sacred, as we shall see.[51]

Polanyi notes that modern men have particular difficulty in appreciating the holistic vision of some archaic myths because our general view of the nature of things is so different from that of earlier cultures that our sense of plausibility is lacking. Other cultures would find our empirical, scientific outlook to be equally foreign:

> All empirical observation rests ultimately on the integration of subsidiaries to a focal center. All such integrations -- from perception to creative discoveries -- are impelled by the imagination and controlled by plausibility, which in turn depends upon our general view about the nature of things.[52]

While the limits of some archaic beliefs found in myths can be seen to ensue from the reluctance of the primitive mind to accept some conceivable coherences as merely coincidental, the approach of the archaic mind to

---

[51] M, p. 126.

[52] M, p. 144.

XUM

experience is also in some ways superior to the modern approach:

> It is right in experiencing names as part of a named person and an image as part of its subject; for a name is not a name, nor an image an image, except as a subsidiary to the focal center on which it bears. And such is the nature of all meaningful relations.[53]

Polanyi sees the truth of myths, archaic and present, in terms of their ability to unify experience and give it an encompassing dimension:

> We have seen how richly poetic meaning can serve to clarify our own experiences and to express them effectively. The myths of archaic people should be regarded in this light. They are clearly works of the imagination; and their truth, like the truth of works of art, can consist only in their power to evoke in us an experience which we hold to be genuine.[54]

Religious meanings, Polanyi concludes, as found in such imaginative works as rites, ceremonies, myths, and worship, are the most complex forms of the class of meanings that can be called transnatural. This class is based on the perceiver's capacity to embody one thing in another and includes our ability to immerse diffuse experience in a more sharply circumscribed experience. This achieved meaning involves the union of incompatibles and is strikingly emotion charged.[55] Polanyi calls such meanings "acceptances" in order to contrast them with the more commonplace meanings, "observations," in and through which we live.[56] Many modern people, with our narrowly naturalistic sense of plausibility, will never be able to appreciate the rich encompassing vision of a meaningful world available in religious forms of expression; even more than with visionary art, we lack the capacity to integrate the great incompatibility found in myths and rites of religion:

---

[53] M, p. 144.

[54] M, pp. 145-46.

[55] M, pp. 151-52.

[56] M, p. 153.

> When we bring religion and the visionary arts face to face, we begin to see more clearly why the myths and rites of religion (when seen as containing implausible contents) are less easily integrated than visionary works of art. The reason lies in the fact that even when all the representational details in the myths are clearly and frankly regarded as impossible (as the "contents" of visionary art are), the _import_ of these details must still be thought to be _plausible_. For, unlike the contents of a work of visionary art, the contents of a religion will have as their import the story of a fundamentally _meaningful_ world. . . .[57]

In summary, _Meaning_, Polanyi's most recent and probably last major publication, gathers together many of his earlier ideas as well as attempts to expand his theory of tacit knowing to analyze the kind of meaning found in art and religion. In turning to these new topics, Polanyi continues some of the trends evident in his work after _Personal Knowledge_. _The Study of Man_, after reconsidering the problem of a responsible personal knowledge, develops a theory of historiography. This treatment bears witness to Polanyi's interest in applying his perspective to areas other than the scientific community; the treatment of the general problem of meaning and the specific structure of artistic and religious meaning in Polanyi's last book continue this trend.

---

[57] _M_, p. 159.

In The Tacit Dimension Polanyi expands his theory of tacit knowing showing how all human activity can be understood in terms of its from-to structure; he stresses the bodily and indwelt nature of human action. The treatment in Meaning of the transnatural with its emphasis on the imagination, the felt quality of artificial coherences, and the incompatibility of particulars in artistic and religious forms extends this expansion of the theory of tacit knowing even a step farther.

XUM

CHAPTER V

POLANYI'S PHILOSOPHICAL ACHIEVEMENT: A SUMMARY

This chapter concludes the consideration of the emergence of Polanyi's post-critical philosophy. In order to focus the lengthy discussions of the preceding two chapters, two concerns are treated. The opening section provides an integrated, condensed view of the development and scope of Polanyi's perspective. The second section summarizes the epistemological model at the heart of Polanyi's work by discussing Polanyi's outlook around three central foci, the structure, object and medium of knowing. The final section attempts a brief evaluation of Polanyi's achievement and a consideration of some of the limitations of his thought.

SECTION A:

THE EVOLVING SHAPE OF POLANYI'S THOUGHT

To understand the unfolding contours of Polanyi's philosophical life, it must be recognized that the first twenty years of Polanyi's adult life were spent as a highly skilled, brilliant physical chemist. Polanyi's experience as a scientist both set for him the central problems for his later philosophical investigation and shaped the answers he was to articulate for these problems.

Polanyi's early philosophical writings attempt to describe the foundations of the on-going life of the scientific community and show that a creative scientific community subjugated to external control is an impossibility. In Science, Faith and Society Polanyi views scientific knowing as a socially cultivated art; science is a highly specialized form of ordinary perception. He emphasizes the role of skills, tradition and the master-apprentice relationship within a community committed to common ideals. It is the combination of intuition, trust, sober personal judgment and an internalization of values of the community which produce a creative scientist. All of these elements which Polanyi focuses upon in his early analysis of scientific practice are later expanded into some of the central themes of his mature philosophy.

The problem of the nature and justification of scientific knowledge is first directly treated in Polanyi's Personal Knowledge. Personal Knowledge is a massive work whose detail vastly overshadows both the writing which preceded it and that which followed. In the years after Science, Faith and Society, Polanyi became centrally concerned with the process of discovery and the process of understanding. Personal Knowledge seeks to deal with these issues in the larger epistemological context of an analysis of scientific knowledge. This work is self-consciously an attack upon the positivistic ideals and model of knowledge revered by both the scientific community and modern culture at large; it is an attempt to re-shape the tradition of

XUM

thought flowing from the positivists and from Kant and his predecessors.

Polanyi's magnum opus sets forth an epistemological model which denies that human knowledge is limited to explicit or formal knowledge. Knowing is an active comprehension of things known; any explicit or focal comprehension of an object involves a subsidiary comprehension of elements which jointly constitute the object. Polanyi thinks of the knowing process in terms of the in-der-Welt kind of being of the knowing subject. Knowledge is possible in social process; particularized knowledge like that of science is possible, as Polanyi suggested in Science, Faith and Society, through apprenticeship in a specialized community.

Knowing is an act of comprehension achieved by tacitly integrating particulars into a focal whole on which they bear. A person's ability to know and deal with a matter of concern depends upon his possession of any subsidiary skills relevant to the matter. All human tools, like the body, are known subsidiarily when using them to deal with the larger world. To emphasize the tool-dependent character and subsidiary foundation of knowing, Polanyi suggests that we must dwell in the particulars of a situation in order to comprehend it. The range of tools employed as subsidiaries by man is, of course, expansive. For Polanyi human tools include not only physical instruments but language and all the beliefs and assumptions which a person comes to assimilate in his experience in society.

XUM

It is particularly man's languaging or symbolic powers which give human knowledge its complexity and scope. Yet, Polanyi emphasizes that man shares his tacit powers, his abilities to integrate particulars around a focus, with lower forms of life. Man's language capacities spring from his superior ability to combine powers of contriving signs, observing their fitness and interpreting their alternative relations. What language gives to man is an ability to classify experience and critically play it back.

The view of knowing that emerges in Personal Knowledge emphasizes man's physical and linguistic skills. By using our bodies and our tools well as the subsidiaries in which we dwell, man is able to comprehend and explore his world. The Gordian knot Polanyi ties uniting mind, body and tools emphasizes the interactionist community-based character of Polanyi's conception of human knowing. His epistemology is also a generative one; skillful competence at one level provides the base for an extension of skills (i.e., an expansion of potential subsidiaries) at another.

The functional description of knowing which is developed in Personal Knowledge includes a number of corollary entailments which extend Polanyi's epistemology into a Lebensphilosophie. These corollaries are at least partially attitudinal elements which Polanyi understands as necessary for the enterprise of human knowing, operating within the parameters he has set forth, to prosper. He emphasizes the importance of the passionate character of knowing. Polanyi rejects the ideal of an impersonal knowledge but he does not believe that an impassioned knowledge is necessarily subject to whimsy. Polanyi understands the use of tacit powers, whether in articulate man or inarticulate higher animals, as always inspired by intellectual passions. To be sentient and alert involves a quest for satisfaction of certain self-set standards in the use of the body and tools. For Polanyi it is the passionate quality of a subject's attempt to fulfill self-set standards which protects a personal knowledge from irresponsibility. The internalized standards of sophisticated knowing are shaped by common life. They aim at universal validity; a knower's calling (*i.e.*, his life in his own milieu) endows him with standards believed to be self-transcending such that he understands mental achievements meeting such standards as binding not only upon himself but upon all others. Polanyi particularly emphasizes in *Personal Knowledge* that knowledge is upheld by the passionate commitment of the knower. The personal and the universal are correlated in the situation of passionate commitment. The truthful character of human knowledge for Polanyi is not tied to an external correspondence of knowledge and fact (this is an impossible comparison for Polanyi) but to the feeling which a knower has for the rightness of an action as it fulfills self-set standards.

For Polanyi the passions which promote and sustain human knowing flow very directly out of common life. There is a primordial joy that human beings take in being together. The values and hopes that we share are the womb of all man's mental achievements. Conviviality is the emotive medium allowing and supporting the transmission of culture and the expansion of its horizons. Polanyi is one of the few modern philosophers who has acknowledged and supported such conviviality as a major force in man's quest for knowledge.

The basic epistemological model and its generalization into a broader understanding of man which emerge in Personal Knowledge are complemented at the conclusion of the book with Polanyi's evolutionary ontology. Polanyi develops an understanding of human evolution which links knowing and being in a panoramic vision of the world. He argues that the epistemological distinction he has established between focal and subsidiary knowledge entails a corollary ontological distinction in objects known. The being of an object may thus be considered in terms of a union of higher and lower strata of reality which are involved in knowing the object. A higher level of organization cannot be accounted for in terms of a lower, though the lower level of organization sets the boundary conditions within which the higher level operates. In more general terms, this ontology which Polanyi infers from the structure of knowing envisions the universe as a hierarchy of comprehensive entities, each meaningfully uniting a lower and a higher stratum of reality.

This description of the ontological structure of known objects is applied to the issue of evolution by Polanyi to provide an alternative to Neo-Darwinian views. Polanyi's ontology suggests that the evolution of higher forms of organization in organic life cannot be accounted for in terms of an organism's lower level of control, its physical and chemical constitution. The appearance of major organizational novelty must be recognized as an act of emergence; lower levels of organization provide the possibility and conditions for innovation but the emergent innovative principle remains in some senses its own progenitor. Polanyi's view of biotic achievement thus attributes to the organism dynamic properties analogous to those of a system by which the potential energy of the system decreases. Successive biotic achievements have developed progressively more complex organizational systems that have eventually culminated in the concrete personhood of man. For Polanyi the evolution of organic life culminating in man can thus be understood as unfolding according to a logic similar to the logic of tacit knowing.

In summary, Personal Knowledge should be seen as a work that articulates a novel epistemological model which, in turn, becomes the foundation of a larger Lebensphilosophie, an ontology and a perspective on evolution. This middle period of Polanyi's thought can be recognized as growing out of some of the concerns and themes of earlier work, but the complexity and scope of Personal Knowledge could hardly have been anticipated in the sociological outlook of earlier work. Epistemology has served Polanyi as an area of thought to deal with questions about the nature and justification of scientific knowledge. But the treatment of Personal Knowledge moves beyond this analysis of science narrowly conceived into a much broader philosophical anthropology.

In the shorter works that follow Personal Knowledge, Polanyi refines and extends his theory of tacit knowing and uses it to treat non-scientific concerns. The Study of Man, published in the same year as Personal Knowledge, is an essay on historiography. The opening chapters are a condensed recapitulation of the perspective of Personal Knowledge. No significant changes in Polanyi's thinking are apparent, although he does extend the investigation of Personal Knowledge to the area of historiography. Polanyi is correct that The Study of Man would admirably serve as an introduction to the denser Personal Knowledge.[1] The opening sketch in The Study of Man of the theory of tacit knowing is shaped particularly to show that thought is man's highest achievement; this focus provides an introduction to the concluding chapter's discussion of historiography. Polanyi is especially concerned in these early chapters to show that his claims for a personal knowledge are not an endorsement of subjectivism. He stresses that the components of a knower's physical and social situation are the concrete opportunities through which the person can become a responsible knower.

Polanyi's treatment of the problems of historiography illustrates his broadening interests and his belief that his epistemology has important implications for humanistic studies. Polanyi

---

[1] SM, p. 9.

XUM

conceives of the writing of history as an unique science at the apex of a spectrum of other sciences. The study of man is the most personal and complex kind of understanding; it aims at encountering a human mind engaged in momentous actions. A historian must avoid tendencies toward historicism, rationalism and materialism and maintain a balanced judgment of the mental achievements of the subject figure. The historian's own situation as an embodied person in history provides the concrete opportunities for exercising his judgment; to exist within the hermeneutic circle is not a liability making the writing of history a hopelessly subjective endeavor. Polanyi acknowledges that the historian's strenuous efforts to dwell in and understand the life of a great historical figure may involve the acceptance by the historian of the values he attributes to his subject figure. The historical personality becomes an ideal which serves to inform the historian's larger attempt to interpret patterns of action and response in world history. While such acts of affiliation are fraught with the liabilities of corruption, they also are the means by which cultures and communities receive their norms, values, and destiny.

The Tacit Dimension, published eight years after The Study of Man, is the clearest and most concise statement of Polanyi's epistemology. Here Polanyi has systematically organized his understanding of the structure of tacit knowing. Compared to his middle period, Polanyi has now expanded his view of man's reliance on the tacit shaping of experience; his treatment of ontological and evolutionary themes inferred from his epistemology is lucidly stated.

In _The Tacit Dimension_ Polanyi strongly emphasizes the bodily character of knowing. In both _Personal Knowledge_ and _The Study of Man_, Polanyi suggests that the way man skillfully uses his body is a paradigm for all knowing. However, it is in _The Tacit Dimension_ that Polanyi thoroughly explores and develops this paradigm. In emphasizing indwelling and the skillful from-to aspect of knowing, Polanyi stresses how all thought is guided by its subsidiary components. In _The Tacit Dimension_ Polanyi expands the theory of tacit knowing to show that even subliminal aspects of bodily experience conform to the logic of tacit knowing insofar as they involve an active integration of particulars to produce a certain response. Neural processes can be considered as tacit dimensions of our knowing, since, when they give rise to consciousness, their meaning appears in terms of the experience to which a person is attending. Polanyi also studies the problem of the _Meno_ and concludes that our ability both to shape and to solve problems is tacitly grounded. All novel thought thus involves tacit roots functioning like parts of the body. The emphasis on the bodily character of human activity in _The Tacit Dimension_ marks a subtle shift for Polanyi away from his earlier emphasis on the intentional commitment undergirding personal knowledge. The _Lebensphilosophie_ which is integrated with Polanyi's epistemology appears in _The Tacit Dimension_ to be more akin to a bodily existentialism than an overt fideism.

XUM

The ontological and evolutionary implications of Polanyi's epistemology are more clearly developed in The Tacit Dimension than in Personal Knowledge. Polanyi argues that the comprehension of an entity reveals the structure of its being. The being of any comprehensive whole is composed of an upper stratum of reality operating in the margin left undetermined by its lower stratum. Polanyi uses this ontology to develop a teleological evolutionary argument. He views man as a hierarchy of operational systems initially released by the potentialities of inanimate matter and brought to its present stage by a series of emergent acts in which new principles creating an increasingly complex organism came to dominate. Man as a responsible knower seeking the unknown represents for Polanyi the fulfillment of the present stage of evolutionary emergence.

Polanyi's most recent book, Meaning, published late in 1975 with the help of a collaborator, consolidates and integrates writing after The Tacit Dimension around a discussion of the structure and availability meaning. The general structure of Polanyi's treatment of the problem of meaning moves from an analysis of the destruction of meaning by the modern mind to an understanding of the encompassing forms of meaning found in art and religion to a concluding discussion of the necessary structures of a society committed to the nurture and pursuit of meaning in all its forms. Most of the conclusions Polanyi draws about the tendencies of the modern mind, the availability and structure of meaning and the structure of an open

XUM

society are re-affirmations of conceptions which have repeatedly emerged in his writing since Personal Knowledge. What is particularly significant in Meaning is the effort Polanyi makes to expand the theory of tacit knowing to treat the forms of meaning he believes are found in art and religion.

Polanyi's argument analyzes the semantic structure of symbol, metaphor and art and then extends this perspective to the forms of myth and religion; all of these forms he groups together as artificial coherences whose meaning he calls "transnatural." Polanyi draws a basic distinction between the vectoral indicative integrations involved in forms of knowing ranging from perception to scientific discovery and integrations in which subsidiaries are of equal or of more importance than the focus. In such integrations, the focus achieves its significance by embodying its subsidiaries. Polanyi calls such integrations "self-giving" (as opposed to more ordinary "self-centered" integrations). He develops his view of art and religion from this basic distinction showing how with all artistic and religious forms the perceiver is confronted with a certain incompatibility of elements which he yet must integrate.

In summary, Polanyi's philosophical career stretches from his early interest in an analysis and defense of the scientific enterprise to his present study of the meaning of art and religion. The development of his thought follows a course of gradually broadening interests. His early sociological analysis of the scientific community

XUM

is transposed into a broader-based epistemological inquiry in Personal Knowledge. Polanyi's magnum opus aims at undercutting the positivistic inclinations of scientists and those influenced by science by developing a new understanding of knowing. Polanyi argues that knowing is personal and dependent upon the knower's tacit powers and his involvement in a community. Epistemology is not for Polanyi merely a prolegomena to a more detailed systematic philosophy; it is the basic touchstone from which all his more encompassing generalizations about human existence are generated. Flowing directly from the epistemology of Personal Knowledge are a Lebensphilosophie, an ontology and an evolutionary anthropology; Polanyi extends his epistemological insights into a broader vision of man as a responsible creature seeking to understand the cosmos of which he is a part.

The basic shape of Polanyi's thought emerges in Personal Knowledge; works that follow refine and apply the theory of tacit knowing to special areas. The Study of Man develops a theory of historiography. Here Polanyi draws on the same basic themes which are found in Science, Faith and Society and Personal Knowledge to emphasize the potentially responsible role as a knower which a person's concrete existence provides and to analyze the problems of writing history. Polanyi stresses the requirement of balanced judgment on the part of the historian and the element of encountering another mind involved in historical understanding; he points out the role great historical personalities play in shaping the values and destiny of those living

XUM

in their wake when such figures become an ideal for the historian. The Tacit Dimension, Polanyi's Terry Lectures, is a refinement of the theory of tacit knowing. Here Polanyi succinctly organizes the central elements of his philosophical perspective. More than in Personal Knowledge or The Study of Man, he emphasizes the role of the body in all knowing. In suggesting that all thought is bodily and is led by its subsidiary components, Polanyi's views resemble the bodily existentialism of Merleau-Ponty; his expanded conception of tacit knowing reduces his earlier reliance on commitment as a central element of his conception of personal knowledge. In The Tacit Dimension the ontological and evolutionary implications of Polanyi's epistemology are more clearly explained than in earlier work; both his ontology and his evolutionary anthropology can be seen as logical extensions of the principles operative in his model of knowing. Meaning, Polanyi's last book, summarizes many of Polanyi's ideas around a discussion of the problem of meaning but also extends the theory of tacit knowing in an analysis of the semantic structure of art and religion. Polanyi treats artistic and religious forms as artificial coherences; he means by this that they have their meaning and power through the perceiver's capacity to embody or symbolize subsidiaries in a focus. To understand the meaning present in such forms, a person must integrate incompatible elements. We must see with the eyes of imagination the unified import of items which in themselves seem incompatible and unbelievable.

SECTION B:
THE STRUCTURE, OBJECT AND MEDIUM OF KNOWING

Polanyi's epistemological model is the core of his perspective; the following section condenses and logically represents this model which has emerged in the preceding developmental discussions by subsuming Polanyi's ideas under three categories: the structure, object and medium of knowing. This three-fold division is not explicitly used by Polanyi though it is a natural division suggested by his late work.

The Structure of Knowing

For Polanyi, a focally known Gestalt is always formed by an integration of tacitly-held particulars. The structure of knowing, functionally represented, has two terms. The first term, the tacit, subsidiary or proximal term, is that a knower attends from in order to know the specifiable second term which jointly constitutes all of the tacit particulars. The second term is the distal objective or whole. The term "knowledge" is commonly applied to only focal or explicit knowledge; Polanyi hopes to extend the scope of knowledge to include tacit or subsidiary knowledge through which all focal knowledge is realized.

Polanyi has isolated and named four different elements of

XUM

the dynamic involved in the relation of the two terms of knowing.[1] The functional structure of tacit knowing involves the logical relation between the two terms. A knower always attends from the proximal to the distal term. The functional relationship between subsidiary and focal awareness is one in which the subsidiary component is always subordinated to the focal component. Because the direction of knowing is always toward the distal objective, tacit knowing usually has a vectorial character. Polanyi's recent book, Meaning, somewhat modifies this view in the case of the artificial coherences found in artistic and religious forms; sometimes the movement from proximal to distal involves an embodiment of significant particulars in an insignificant focus.

The phenomenal structure of tacit knowing identifies the locus of conscious awareness in an act of knowing:

> We may say, in general, that we are aware of the proximal term of an act of tacit knowing in the appearnace of its distal term; we are aware of that from which we are attending to another thing in the appearance of that thing.[2]

The phenomenal accompaniment of an act of tacit knowing means that a subject regards what he has comprehended as a real, coherent entity. The semantic aspect of tacit knowing combines the functional and phenomenal attributes and locates the meaning in an act of tacit knowing. The meaning of the proximal term appears in terms of the unified distal term. Subsidiary elements often have meaning when focused upon (i.e., when they are no longer subsidiaries), but the meaning they have subsidiarily is different from such isolated significance; it appears in the distal term on which they bear which is an integration of tacit components. Meaning is displaced away from the knower.

---

[1] Discussion follows TD, pp. 9-13 and KB, pp. 140-41.

[2] TD, p. 11.

From the functional, phenomenal and semantic aspects of tacit knowing, Polanyi deduces a fourth aspect, the ontological aspect. He equates the understanding of an entity which the other three aspects principally account for with the structure of an entity's being. That which an act of tacit knowing is a knowledge of is the ontological aspect of the entity:

> Since tacit knowing establishes a meaningful relation between two terms, we may identify it with the understanding of the comprehensive entity which these two terms jointly constitute. Thus the proximal term represents the particulars of this entity, and we can say, accordingly, that we comprehend the entity by relying on our awareness of its particulars for attending to their joint meaning.[3]

Polanyi's claims for the ontological import of knowing are not an attempt to fix the being of an entity as a static character. Different knowers rooted in different communities of interpretation and thus bringing somewhat different sets of tacit components to bear upon an act of comprehending an entity, may attribute to the entity somewhat different ontological characters. The particular ontological status of a known entity thus depends upon the character of the tacit components a knower attends from. Such a conception does not absolutely relativize Polanyi's ontology for the coherence of human social life preserves a high degree of similarity among knowers' subsidiary awareness. Because men live within common patterns of action, the being we discover in most entities is common and stable. Polanyi's epistemology and the ontology inferred from it are through and through social or communal in character.

---

[3] TD, p. 13.

Polanyi's relational conception of the being of known entities points to his view of the stratified character of knowing and being; knowing occurs at different levels of encompassingness and knowledge and being consequently embody strata of reality of various breadths. This can best be considered by turning to a discussion of the objects of knowledge, the comprehensive entities that compose reality.

Comprehensive Entities

In the most general sense, any object of focal attention is a comprehensive entity; it is the explicit image or performance in which tacitly-held particulars are jointly seen or enacted. What is a comprehensive entity in one instance of focusing may in another instance be a tacitly-held particular attended from in order to view a new whole. A reader, for example, attends from the shape recognized as letters and from syllables to the word, but then, as the eye flows across the page, attends from the word to the sentence it is a part of. This suggests not only that knowers can switch their attention but that things known have a hierarchical structure. For Polanyi this view has ontological implications. Tacit knowing provides a model for the discernment of the distinct levels of reality.[4] The real entities populating the universe also have, in terms of their own constitution, a hierarchical structure and, in terms of their relation to other real entities, a similar subordinate-superordinate relationship. Different principles of operation and organization govern the different levels of real entities. Previous discussions have focused upon the machine as a demonstration of this view. Polanyi conceives of a real entity in terms of its higher and lower levels of control. A machine has a physical and chemical constitution subject to the laws of physics and chemistry. But it also has a higher level of organization -- that which gives it its identity as a machine -- which is governed by mechanical principles. A knower knows the machine *qua* machine in terms of its higher principles; we do not call a machine a physical and chemical strategem but a mechanical one. Polanyi speaks of the higher and lower principles of operation governing an entity as corresponding to the tacit and focal elements of an act of tacit knowing. The higher level of control in an entity relies upon the operations of its lower level but the higher organizing principles cannot be accounted for in terms of the principles governing the particulars in themselves. The mechanical principles which a machine embodies cannot be accounted for in terms of the physical and chemical principles governing its parts. In the case of a machine, the mechanical shaping of material takes place in the margin left open by the physical and chemical limitations of the material. The ontological structure of an entity thus shows that it is subject to "dual control."[5] The lower level of control totally controls the functioning of particulars in themselves but leaves open certain boundary conditions within which more complex organizational principles shaping the entity work.

---

[4] Edward Pols, "Polanyi and the Problem of Metaphysical Knowledge," *Intellect and Hope*, p. 71. After first citation articles in this volume are cited by author, page and title abbreviation *IH*.

The distinction which Polanyi establishes here between levels of control in an entity he uses as an important logical argument against all forms of reductionistic thought. His teleological evolutionary argument is a case in point. The process of evolution cannot logically be understood in terms of random selection. Higher principles of control cannot be deduced from lower ones. The organism must therefore be viewed as something like a self-centered initiator. This germ of inventiveness Polanyi equates with the tacit, acritical powers which he has argued are the foundation of human knowing. As Pols comments, Polanyi in his evolutionary ontology thus comes full circle in his argument:

---

[5] KB, p. 217.

> . . . the entity upon whose personal, or tacit knowledge the whole epistemological viewpoint is based is taken as an example of the ontology that epistemology opens up. . . .[6]

Polanyi's ontological extension of his theory of knowledge suggests that the real entities of the world are a union of two strata of reality. A more generalized ontology or view of the universe can be generated from this same bi-level principle. Though Polanyi does not develop this fully, he implies that the entities composing reality have somewhat the character of a set of Chinese boxes. Each entity has a higher and a lower level and an aggregate of entities may be the particulars composing the lower level of a more encompassing entity. The point of this relational conception seems not so much to be to establish a definite cosmology as to emphasize the fecundity of reality. The universe is for Polanyi inexhaustible; reality is an open system rather than a closed one. Reality can be conceived neither as wholly external nor wholly internal; it is neither a figment of viewing nor a state of affairs absolutely separate and distinct from its perceivers. Reality for Polanyi simply defies this polarity; it fits into neither camp, yet draws from both. Reality is an emergent. It is by believing that discoveries are made and knowledge is sustained. Polanyi finds a constructionist view of reality (*i.e.*, belief makes reality) untenable because it overemphasizes convention and deprecates both human belief and the power of that which is non-human. On the other hand, the view that reality always already has a discrete form and simply awaits discovery or actualization tends toward a naive empiricism and again deprecates the importance of belief. The one point which Polanyi's discussions of reality do make very clear is that reality cannot be altogether equated with tangibility.[7] A real entity may be tangible or intangible. Persons and problems are as real as cobblestones. In fact, because persons and problems have more profundity, Polanyi regards them as more richly real than the merely tangible. Their future manifestations remain indeterminate, while the manifestations of the tangible cobblestone are relatively determinate:

---

[6] Pols, *IH*, p. 73.

> This capacity of a thing to reveal itself in unexpected ways in the future I attribute to the fact that the thing observed is an aspect of a reality, possessing a significance that is not exhausted by conception of any single aspect of it. To trust that a thing we know is real is, in this sense, to feel that it has the independence and power for manifesting itself in yet unthought of ways in the future. I shall say, accordingly, that minds and problems possess a deeper reality than cobblestones, although cobblestones are admittedly more real in the sense of being tangible.[8]

In this view, the Platonic tendencies in Polanyi's conception of reality are evident. Reality is marked by power; Polanyi has no reticence whatever about referring to the independence or externality of the real when speaking of its revelatory potential or intimated fruitfulness. Like Plato, Polanyi's work suggests a gradiated view of reality.[9] This is clearly visible in such features as his image of the spectrum of the sciences ranging from physics to the study of dramatic history. Polanyi understands the study of man (i.e., dramatic history) as the discipline of most encompassing scope; it is both the most personally involving and most ambiguous dimension of reality.

---

[7] TD, pp. 32-33.

[8] TD, pp. 32-33.

In summary, in Polanyi's conception of comprehensive entities knowing and being are united in such a manner that they cannot be severed from each other. Polanyi's conception of reality serves to link knowing and being; this Platonic conception of reality is a problematic conception for those who try to dissect it exclusively from either the perspective of knowing or that of being. Reality is an emergent, a fabric of relationally constituted entities of varying encompassingness.

The Medium of Knowing

Knowing has a from-to structure whereby tacitly-held particulars are integrated in order to attend to a focal image which such particulars jointly constitute. Within this model Polanyi argues that the role of the body is crucial; it is in the deepest sense the medium of knowing. This is true in two senses. First, since human knowing depends directly on sentience, the physical body is literally involved in all acts of knowing whether rudimentary or highly abstract. More importantly, Polanyi thinks of the body as the basic tacit components for man's exploration of the world; the use of the body provides a model for knowing to which all instances of knowing must conform. The human body is known subsidiarily as it is used to attend to that which is external; the meaning of the body, unless it is focused upon, is in terms of the meaning of external objects it brings into focus.

---

[9] Pols, IH, p. 74ff.

The body can serve as man's primary tacit component for dealing with the world because its use is coordinated. The elementary skills of the body are the foundation upon which other skills are built. Polanyi's view of knowing is a generative model; that which has been mastered becomes the basis for acquiring further abilities. Polanyi's conception of skills includes not only bodily coordinations but also conceptual coordinations such as that involved in internalizing a scientific paradigm in order to use it. Knowing is thus always skilled. In almost all acts it includes both a knowing-what and a knowing-how. Polanyi regards any literally external skill (*i.e.*, such as an assumption or an instance of tool use) as an extension of the physical body; it is by extending our bodies or dwelling in that we know.

With the theory of tacit knowing there is no basic division between the knowing subject and the world. The description of the body is a functional description; the body thus has an expandable character. That in which we dwell or that which is subsidiary in a given act defines the body or the bodily component of that act and in another act of knowing with different particulars the parameters of the body will change.

That which is tacit shapes what we focally understand. In this sense the body or the bodily component of knowing can be said to lead all thought. Our skills are the subsidiary armory through which the world comes to be experienced. In the case of novel thought, Polanyi speaks of our tacit or bodily knowledge as a force which strikes out ahead of our focal ability to grasp conceptually our course; this is intuition and it always precedes our ability to achieve rational, logical knowledge. Our integrations are in a sense a bodily tacit achievement which involves a time lag. The solution to difficult problems or integrations involving great incompatibility such as those of the art work are felt before they are absolutely clear in a logical, rational sense. Just as bodily knowledge moves ahead and shapes focal attention, it functions also silently to sustain the focal grasp of an entity achieved in an integration. Our hold on a perceptual object is dependent upon the continued skillful coordination of all the elements, physical and social, which produce our focus.

The theory of tacit knowing shows a person's great dependence on his body. Because what actually functions in a bodily way extends far beyond the scope of the physical body, Polanyi's epistemology devotes much attention to the community. The community is the physical body's teacher. As suggested above, our skills include much more than rudimentary physical coordinations, although these are the foundation of our lives as knowing creatures. Our potentialities for embodiment are shaped in social life. Our involvement in social process is the source of the tools we use subsidiarily. Language, of course, is one of man's most important bodily components; it introduces us to the possibilities of critically understanding ourselves and our world. Polanyi treats specialized forms of knowledge such as that of science as the product of specialized communities; a person is able to become a scientist by being in a scientific community where he assimilates the skills necessary to appreciate specialized scientific work and engage in it himself. It is not by following a set of rules that skills are learned but by imitation. The novice learns in action or interaction and learning is grounded in an act of submission by the novice to the integrity of his teachers. Learning and all other types of knowing involve trust and all knowledge has a fiduciary component. The master-apprentice educational model is very important for Polanyi; it is really a generalized form of this model that lies behind many of Polanyi's ideas about the desired structure of society.

The community provides man with the tools by which we are able to extend ourselves into the world; the range and scope of our bodiliness is given shape in the domain of our involvement. For Polanyi the community also provides the emotional fabric within which such tools and their use become a valuable, exciting enterprise. The convivial order of life supports and sustains acts of knowing in a very direct way. The passions which flow into our lives and infuse our work shaping our commitments and our standards of judgment are convivially rooted. In the deepest sense, the community is the repository of a living tradition into which we enter as we are socialized. In this sense, Polanyi thinks of human knowing as a traditional enterprise. We become embodied, capable persons by assimilating a tradition. But Polanyi does not understand traditionalism as static. Throughout his work he emphasizes the importance of innovation. The problem of discovery is one of the central problems which motivated the writing of Personal Knowledge. Knowing is for Polanyi almost a drive; the quest for the unknown always beckons. Tradition and innovation, rather than being antithetical, presupposes each other. Polanyi believes that it is only by internalizing a tradition that a person achieves the familiarity with a perspective or endeavor which allows him to understand and contribute to its work. Innovation sometimes involves the rejection of elements of tradition (as, for example, in the development of a new scientific paradigm) but this is possible only when a knower already possesses the necessary skills. It is a person's acceptance of the values of the tradition which hold pursuit of truth foremost which supports the innovation which reforms tradition.

In summary, Polanyi treats the body or that which has been embodied (i.e., dwelt in and made a subsidiary) as the basic medium of all knowing. The theory of tacit knowing is a generative, skills-based model of knowing. All tools are subsidiary extensions of the body. Our life with a social body shapes the way in which our own bodies can be extended in the quest for an understanding of ourselves and our world.

SECTION C:

ACHIEVEMENTS AND LIMITATIONS OF POLANYI'S PERSPECTIVE

To conclude the discussion of Polanyi's philosophy, I shall attempt briefly to assess what I take to be the important achievements and some of the difficulties and limitations of Polanyi's thought.

Achievements

Polanyi's major philosophical contribution is the development of a logically coherent statement showing how knowledge is grounded in belief. He accomplishes this with the creation of his own innovative epistemological model whose ramifications he extends into a broader understanding of man. The excellence of his epistemological model lies in the fact that it is a holistic functional description of the process of knowing. Polanyi's perspective, insofar as it has an

XUM

active view of the knower, is a Kantian perspective, but its functional outlook succeeds in describing knowing without the attendant ontological distinctions of Kant, his impoverished understanding of the person, or his static, rational criteria of truth. Polanyi's perspective is a processive perspective which attempts to portray knowledge as the product of a living person rooted in an historical community.

With his functional description of knowing, Polanyi strives for a holistic view of knowing. He replaces several substantive, logical and ontological distinctions which have traditionally been basic for epistemology with his functional division of the knowing process into tacit or subsidiary and focal terms. Since the body or the bodily, tacit component of knowing shifts in different acts of knowing, Polanyi denies that epistemology must begin with a basic substantive bifurcation between subject and world. Like the existential phenomenologists, the knowing subject for Polanyi is always a worldish subject; man's being is a being-in.

Polanyi's functional emphasis and his analysis of skills as a bodily, tacit ground of knowing argues against any fundamental epistemological distinction between body and mind. All knowing is bodily in structure (*i.e.*, is shaped by what is tacit and what is tacit functions like the body and may be regarded as an extension of the body whether it is a physical or a conceptual tool); any predominantly mental knowing depends on skillful coordination of elements of the physical body functioning as the proximal pole for attending to a distal mental objective. Body and mind merge for Polanyi though mind may be seen as a higher level of operation in the person governed by its own principles (standards internally held which are assimilated and/or chosen in social interaction with other minds) but dependent upon the correct functioning of a physical level of operation.

The distinction between knowing-what and knowing-how, a more recent epistemological distinction somewhat akin to that between body and mind, Polanyi also finds of limited usefulness. Since he argues that all knowing is skillful at some level, a clear distinction between performative and conceptual knowledge is impossible. All conceptual knowledge involves a performative knowledge at least at the physical level. Performative knowledge, at least in most sophisticated cases, is inspired by other knowledge which has conceptual dimensions since man is a social creature.

The traditional subjective-objective logical distinction used to describe knowing and knowledge is reshaped in Polanyi's thought. His functional description of knowing always presupposes a person as the shaper and holder of all knowledge. Polanyi does employ the logical distinction between the knowing subject and the known object, but his epistemology begins with an out-of-hand rejection of the possibility of a fully objective knowledge. All knowledge is personal; it is achieved by a person who undertakes and

XUM

accomplishes a tacit integration of particulars. Polanyi's work recasts the entire conception of human knowledge in terms of the living, historical person who shapes the meaning he discovers in the world. This participatory personal conception establishes personal criteria of true knowledge (in terms of fulfilling self-set standards and commitment to the universal validity of personally held understanding) set within a pluralistic but not relativistic view of the true. In this respect, Polanyi's ideas somewhat resemble the perspectival emphasis of Merleau-Ponty, although Polanyi emphasizes perspectival communities more than individual perspective. Within Polanyi's conception of personal knowledge, he redefines subjective knowledge as knowledge achieved in the passive endurance of experience and objective knowledge as knowledge achieved in a passionate quest for understanding and to which the knower is committed with universal intent. This understanding of "subjective" and "objective" Polanyi believes, restores to these terms the important logical import which they originally had in the era of Copernican science.

Polanyi's theory of tacit knowing can be seen also as an attempt to overcome some of the philosophical difficulties which ensue from splitting the realm of knowledge and the realm of being. Polanyi's active sense of the knower does not, like Kant, involve a conception of a phenomenal and noumenal realm. Kant's bifurcated vision serves ultimately to demote human knowledge to the status of appearance. Polanyi seeks to affirm a positive link between knowing

XUM

and being in his claims for the ontological aspect of tacit knowing. What personal knowledge is a knowledge of is the being of the entity known. The being of an entity can be described in terms of the union of different levels of reality or in terms of the union of different levels of operational principles which constitute the strata of reality. From the structure of knowing, Polanyi thus infers an ontology; this is then employed as a powerful instrument for criticizing reductionistic forms of thought. His own consideration of evolution is grounded in his contention that Neo-Darwinism is an illogical, reductionistic perspective. Polanyi's conception of the being of entities is novel in that it is a thoroughly relational conception and it speaks of being only in terms of knowing. The being of an entity is a known relation of operational levels or of higher and lower stratum of reality but, because reality is an emergent, being also has a certain dynamism. Living being is for Polanyi in the process of evolving toward more complex forms of organization; it is an emergent establishing a more complex, concrete form of reality. Polanyi's view of being also suggests that statements about ontological structure are always very much dependent upon the perspective of the knower; the assumptions and skills or, more generally, the tacit components brought to bear in shaping the understanding of an entity must be very similar among different knowers in order for the same ontological aspects of an entity to be appreciated. In this sense, as Polanyi's analysis of Evans-Pritchard's encounter with the Azande shows, it is very difficult for knowers with widely divergent forms of life to speak of a common being in an entity (*e.g.*, the poison oracle) which is diversely understood. In summary, Polanyi's interest in the ontological aspect of tacit knowing needs to be understood primarily as an attempt to affirm that knowledge is not merely a knowledge of appearance but of reality; the being of entities is accessible in understanding, but since reality is an emergent, being bears upon an indeterminant range of future implications. Polanyi's whole conception of being is quite different from traditional notions and must be understood in the context of his view of the communal character and tacit base of human knowledge.

Not only does Polanyi's thought strive for a holistic understanding of human knowing in the respect of attempting to overcome a number of traditional fundamental epistemological divisions which he sees as misleading, but he also works to create a perspective which is holistic in that it treats the emotional components of knowing. All personal knowledge is impassioned for Polanyi. Passions are not simply extraneous by-products of understanding, but are intrinsic components which help shape knowledge. Polanyi argues that passions have logical functions which promote knowing and that they are the foundation of the knower's creation and acceptance of standards of judgment and of his quest to fulfill these standards. The veridical component of knowledge for Polanyi cannot be divorced from the passionate and responsible character of personhood. Neither the purely rational criteria of truth suggested by Kant nor purely empirical criteria are adequate if the person as a living, socially involved knower is fully recognized.

In a broader sense, Polanyi sees specific intellectual passions as grounded in the belief structure and emotional support for certain values and kinds of achievement found in the larger social community. Polanyi believes that the joy of human interaction is the primordial convivial root of all knowledge. Though Polanyi's treatment of the passionate or emotive dimensions of knowing argues for the logical functions of such components, there also emerges in these ideas what I have called a Lebensphilosophie. Polanyi's descriptive efforts are transposed into a vision of how man may fulfill his own potential. The quest for an understanding of himself and the reality he is a part of is an unending odyssey in which man ought to engage with a certain passionate, interested concern for Polanyi. It is the image of man immersed in thought set within a cosmos which created him and offers its meaning to him that fascinates Polanyi.

Polanyi's broader understanding of man may also be viewed, as suggested in the introductory remarks prefacing the treatment of his works, as a perspective which brings together a communal and an existential understanding of man. His early writing focuses very directly on the way that natural scientific investigations occur in a community of agents sharing values, purposes and skills. As the theory of tacit knowing took shape and was refined in Polanyi's middle and late writing, this social understanding of knowing was merged with an emphasis on the person who shapes and holds all knowledge. Polanyi's late emphasis on the element of indwelling and the bodiliness of knowing move toward an existential understanding of knowing. The whole emphasis in the theory of tacit knowing upon the vital tacit components of knowing show how human action is pre-reflectively shaped.

A final achievement found in Polanyi's work is the ordered vision of all life which he develops. Throughout his writing, Polanyi strives to portray both the parallels and the distinctions between human life and that of lower organic forms. The theory of tacit knowing is applied most specifically to human knowing, but Polanyi argues throughout his writing that the achievements of lower forms can best be understood in terms of the from-to structure of tacit knowing. The treatment of evolution which Polanyi develops extends this view a step further in showing how the evolution of life can be viewed in terms of tacit powers. This whole cosmological aspect of Polanyi's thought is, to be sure, the most speculative component of his work, yet it has a certain logical coherence and breadth which is satisfying. Since the theory of tacit knowing includes considerations of such encompassing scope, it is in some ways misleading to consider Polanyi's work under the rubric of epistemology as conventionally understood; Polanyi's comprehensive imagination as mirrored in his vision of the order of life, suggests that his achievement might best be viewed as a comprehensive philosophy of organic action.

In summary, I believe that Polanyi's philosophical perspective achieves a holistic understanding of human knowing and a satisfying coherent, more encompassing view of man and his world which is rooted in this epistemology. Polanyi's functional description of knowing is an innovative and exceedingly fruitful perspective from which to consider human knowledge; it succeeds in overcoming a whole series of substantive, logical and ontological bifurcations which have traditionally been the starting point for epistemology. Unlike most philosophers, Polanyi's work is very sensitive to the passional components of human knowing. His work places his understanding of man in the context of an understanding of the powers of all life. It brings together a communal and an existential view of man in focusing on the tacit powers of man as a living, embodied creature living in a community of peers.

Difficulties and Limitations of Polanyi's Perspective

There are many difficulties with Polanyi's style of philosophizing.[10] Since the style and the content of a thinker's work are never fully separable, such difficulties are very real; I suspect they partially account for the rather small reception Polanyi's philosophical work has had. His writing is lucid, yet at the same time suspiciously impassioned, economic to the point of causing difficulty, and confusingly inclusive in that it brings together things seemingly not of a kind. A reader must have a grasp of the whole scope and import of Polanyi's thought to recognize that each of these difficult attributes simultaneously point to certain important aspects in Polanyi's ideas. Below I shall consider each of the characteristics of Polanyi's style both in its positive ane negative aspects.

Polanyi's writing is always in a very direct idiom which exudes an element of passionate intensity. Passion plays a strong role in Polanyi's epistemology; unlike most philosophers, Polanyi is unembarrassed by emotion. His style of philosophizing mirrors his philosophical convictions, but this is not really clear until a reader understands thoroughly the implications of Polanyi's perspective. The uninitiated reader is probably rightly suspicious, because it appears that he may be dealing with a zealot. Polanyi's arguments are very directly personal; he speaks with what seems at times to be

---

[10] See Langford and Potent's excellent discussion of the difficulties of reading PK. Langford and Potent, "Upon First Sitting Down to Read Personal Knowledge: An Introduction," Intellect and Hope, pp. 3-19.

XUM

a rather unfashionable naive confidence.[11] These elements of Polanyi's rhetoric are all aspects of the confessional mode he adopts as a philosopher.[12] His epistemology argues that knowledge is rooted in belief and his writing is designed "to achieve a frame of mind in which I may hold firmly to what I believe to be the case. . . ."[13] As a reflexive exercise in discovering and articulating his own beliefs which acknowledge their fiduciary roots,[14] Polanyi's direct and impassioned idiom is thus appropriate and consistent with his intentions, although it may prove partially disconcerting.

The brevity of Polanyi's philosophical style also makes understanding the full implications of his ideas difficult. Often it is hard to follow the progression of thought and to see exactly what the most significant concerns presented are. A case in point is Polanyi's discussion of the four aspects of tacit knowing in the opening chapter of The Tacit Dimension. In very brief compass, Polanyi surveys the central elements of his epistemological model. Though he does return to some of the aspects of tacit knowing in later discussions, his initial discussion is so condensed that its importance is likely not to be appreciated by a reader unfamiliar with Polanyi's ideas. For the reader familiar with the Polanyi literature, the four aspects are simply an orderly way to organize the kind of thinking which Polanyi has been developing since Personal Knowledge. Polanyi has a tendency to refine and condense his ideas as he works them through again and again in every written piece; his British sense of parsimony can thus be very pleasing to those who have struggled through earlier presentations of his ideas.

---

[11] Langford and Potent, IH, pp. 11-12.

[12] IH, p. 12ff.

[13] PK, p. 214.

[14] Langford and Potent, IH, p. 14.

Finally, Polanyi's habit of linking seemingly diverse matters in his philosophical discussions is an aspect of his style that is disconcerting but also marks his creativity. Polanyi's work is primarily an articulation of his own coherent perspective; he spends relatively little time in closely arguing points of difference with other philosophers or natural scientists. Polanyi has very diverse experience and he often brings it to bear in treating issues where it seems inappropriate; his is an interdisciplinary philosophy which sometimes alarms more orthodox philosophers but, because of its breadth of allusions, is particularly rich. For example, in Personal Knowledge Polanyi moves from a discussion of the standards governing ordinary perception to a discussion of the internally-held standards governing scientific judgment. While some might argue that Polanyi is here failing to make appropriate distinctions, his strategy is actually very insightful. His aim is to present an understanding of the standards governing all human action on a different ground than is usually developed. Polanyi has great facility for making generalizations which point out the continuity between aspects such as perception and more conscious knowing. In summary, while the diversity

XUM

Polanyi brings to bear in his work creates problems for his readers, it also serves as a tool by which the holistic nature of his perspective is created.

The image of society implied in Polanyi's thought is a more substantial difficulty of Polanyi's work than that posed by his philosophic style of writing and thinking. Skills are for Polanyi the foundation of human knowing. Polanyi's vision of society is largely determined by his interest in establishing a stable context in which skills can be passed down and employed in the various enterprises involved in a seeking the unknown. Polanyi's epistemology serves as a justification for a hierarchical society. The preservation of and expansion of knowledge requires cultivated excellence and a pattern of interaction that recognizes and respects the values of exploration. While Polanyi's epistemological point is well taken, he seems to slip into a somewhat more rigid, political conception of the necessary stratified character of the social fabric. Like Plato, Polanyi holds a vision of society which stresses in the extreme its highly specialized and strictly ordered functions; he seems distraught at the inefficiency and disarray of more democratic orders, though he argues that creative thought can be fostered only in an environment that allows great individual freedom. These rather classical biases Polanyi shows in his vision of the good society are not necessary entailments of his epistemology. It is possible to cultivate and pass on patterns of skillful knowing in social orders that lack the sort of vertical cohesion which Polanyi saw and appreciated in the British society and particularly the British universities of the early twentieth century. In general, Polanyi's political imagination seems to lack the sporting quality of his philosophical imagination.

Polanyi's sometimes virulent criticisms of Marxism are one of the least persuasive components of his thought. He rightly attacks the scientism of some Marxists;[15] his general description of the modern temper (moral inversion, i.e., excessive moral passion coupled with skepticism inspired by the objectivist ideals of science), which he understands as underlying many modern revolutionary movements provides an insightful view of modern man.[16] Nevertheless, in some of Polanyi's political comments, Polanyi indulges in overly broad generalizations. He equates all Marxist thought and social experimentation with that of Stalinist Russia. These anti-Marxist tendencies in Polanyi's thought seem to be strongly influenced by his Hungarian background and his response to the Hungarian revolution as well as his awareness of the history of the scientific community in Stalinist Russia.

The strongly optimistic temper which is pronounced in Polanyi's thought is another dimension of his outlook which needs to be closely scrutinized. Many of Polanyi's ideas about how a knowing subject functions and how a community of such subjects works together are very dependent upon underlying assumptions about the fundamental decency of human beings and their abilities to relate to each other in terms of a norm something like Kant's Categorical Imperative. Polanyi has great confidence in his fellow man. Both a British sense of respect for the integrity and rights of others and a British confidence in man's ability somehow to "muddle through" difficulties undergird Polanyi's philosophical optimism. The faith and hope found in Polanyi's thought is not itself to be faulted, yet it is in a certain sense indicative of Polanyi's naivete about man's potential for evil. Though Polanyi strongly criticizes aspects of modern man's self-understanding, he tends toward the Platonic view that if a more adequate understanding can be achieved, many of our difficulties can be met. Polanyi is not a utopian; he recognizes that societies will always have problems which only partially and gradually can be solved. Yet he is inclined to assume that there are cognitive resolutions if not material ones which make a great difference in human affairs. In summary, Polanyi's mentality is a Platonic problem-solving mentality not particularly aware of the dark side of human existence.

---

[15] See especially PK, pp. 229, 237ff.

[16] See Michael Polanyi, Beyond Nihilism (Cambridge: Cambridge University Press, 1960). CF PK, p. 229ff.

The above consideration of Polanyi's optimism suggests a final, more general observation about the intellectual timbre of Polanyi's perspective. Polanyi is a rationalist though in a sense

XUM

which includes the convivial and bodily mooring of rational thought. Yet, Polanyi tends to view larger human society and its operation too much as an academic rationalist. He well understands the thirst for understanding which undergirds the life of different divisions of the academic community. But his more general understanding of society bears too strongly this stamp of the intellectual community's patterns. It is the thinker's quest for the unknown that is the dominant motif in Polanyi's image of the good. Although Polanyi suggests that thought is deeply rooted in and supported by the convivial motives and ritualistic patterns of social life, it is still thought that represents the key to society. Polanyi's image of society and of the good would perhaps have been less intellectualistic if he had been more broadly concerned with the underlying patterns of valuing and loyalty found in social life.

DIVISION II:

INTERPRETATION AS PERSONAL: TOWARDS A POST-CRITICAL HERMENEUTIC

CHAPTER VI

INTERPRETATION: PERSONS AND TEXTS

SECTION A:

GENERAL INTRODUCTION

The preceding four chapters have described and commented upon the innovative philosophical perspective articulated in the writings of Michael Polanyi. The chapters of this division draw upon this interpretation of Polanyi in order to sketch the broad outlines of a Polanyian hermeneutic. In what follows, I attempt to frame a general conception from within a Polanyian context of the nature of interpretation. I acknowledge that it is the specific interpretative situation of the reader interacting with the poem that has captured my own imagination and serves here as the paradigm case of interpretation. Discussion is, however, not limited to this specific case; reflections on the situation of the reader and the linguistic work of art are intended as a specific instance of the more general problem of the interpretation of art. I acknowledge that I discuss the nature and action of an interpreter much more than I focus upon the particularity of any given text; I believe that the philosophical nature of a text, literary or otherwise, can be understood only through an understanding of the interpreting person. I emphasize that this treatment is not intended as a practical methodology for critics; it is a circumscribed philosophical analysis of what is involved in interpreting texts.

The relevancy of a program adapting Polanyi's thought to address hermeneutical issues is not self-evident. My motives can be clarified by briefly focusing on the concerns of Polanyi's late thought and some of the issues currently debated by literary theorists. A major component of Polanyi's writing after the period of The Tacit Dimension is his analytical reflection on representational art. The third division of this dissertation examines this material in detail. Polanyi's ideas about representational art are complex ideas that depend both on his own epistemological perspective and, it seems to me, on a Polanyian notion of how an audience deals with art. Though the latter concern is closely integrated with epistemology, it is not identical with it; a theory of interpretation is thus an anticipated but unarticulated and, to some degree unexplored, component of a post-critical philosophy. Although this attempt at a theory of interpretation adds another piece to the puzzle, Polanyi bears no direct responsibility for it; whatever excellences or difficulties the reader finds herein are the product of my own Polanyian imagination.

The second and more direct impetus for a Polanyian essay on interpretation comes from the literary critical community. Those who interpret literature and literary history professionally have not until relatively recently shown broad interest in the philosophical problems of interpretation itself; they have been (and the majority continue to be) more practical and have spent their efforts analyzing texts rather than attempting to understand the philosophical nature of their interpretative acts. For a variety of reasons -- for example, the breakdown of the New Criticism, expanded interdisciplinary studies, growth of linguistics, among others -- interest in theoretical questions has blossomed recently. "Theory of literature" is now a sub-discipline recognized within the larger literary-critical community. With the new interest in methodological and philosophical dimensions of critical interpretation there have come a bewildering array of new models and theoretical perspectives on the nature of interpretation. Running through the great majority of these interesting theoretical contributions, I find a single question which in fact belies an anxiety of many literary critical theorists: is interpretation an objective or subjective act? Many of those taking an objectivist view[1] are overly influenced by a naive understanding of scientific knowledge; they race to include their discipline among those

---

[1] By "objectivist view" I mean an understanding which claims that the meaning of a text is fully specifiable. That is, meaning (often termed the "true," "original," or "intended" meaning) is singular, unchanging and universal and thus interpretative acts can be fully objective in the sense of impersonally reflecting meaning. I acknowledge that within this class there is a reasonably broad spectrum of opinion. See, for example, the "objectivist" views of E.D. Hirsch, Jr., "Three Dimensions of Hermeneutics," New Literary History (Sp. 1972), pp. 245-61.

XUM

with hard knowledge. Often such theorists defend certain commonsensical notions about interpretation; yet, they also often dogmatically attempt to establish a rigid conception of the availability, self-evidence, and singularity of meaning in the literary work. They seem to fear that unless the meaning of the text can be objectively established, the legitimacy of the literary-critical profession is called into question. Radical subjectivity appears to be the only alternative to an objective view of interpretation and if interpretation is subjective they infer that there is no justification for the authority of the professional interpreter.

This dismal perception of alternatives is at least in part understandable. There are prominent critical theorists who publish interpretations of literary pieces that appear to be largely whimsical; such work seems to embody the worst aspects of the objectivist's projections about subjective relativism. The brilliant, philosophically sophisticated theorist Roland Barthes, who, if he is not a subjectivist is at least broadly misunderstood as such,[2] argues that the character of criticism is determined by the fundamental ambiguity of all signs. Barthes contends that the meaning of a piece of literature must be regarded as forever indeterminant: literature is:

---

[2] Many also think of Barthes as making literary interpretation into a science.

> An unfulfilled technique of meaning -- what does this mean: It means that the writer is concerned to multiply significations without filling or closing them, and that he uses language to constitute a world which is emphatically signifying but never finally signified.[3]

An interpreter rather than seeking a satisfying coherent meaning in his encounter with a piece of literature, should be engaged in an act he understands as one of an endless series of acts generating possible meanings. The critic's task is to generate possible significations and describe the means by which each generation becomes possible. Barthes thus calls for a criticism in which "interpretation can function in a realm purely internal to the work. . . ."[4] The integrity of an interpreter rests finally upon his ability to withhold credence from any given generation and continue to play out the possibilities of the sign; the only way to avoid "'bad faith' is to take as a moral goal not the decipherment of the work's meaning but the reconstruction of the rules and constraints of that meaning's elaboration. . . ."[5]

---

[3] Roland Barthes, "Literature and Signification," Critical Essays, trans. Richard Howard (Evanston: Northwestern University Press, 1972), p. 268. All future citations are to different articles in this work and are footnoted by article, title and page number.

I find that many of my own ideas about interpretation parallel some aspects of Barthes' understanding. This quotation affirming the ambiguous, inexhaustible richness of literature anticipates some of my own conclusions following in later chapters. The implications about interpretation as a formal generation and description of meaning possibilities which Barthes draws from his affirmation of the sign's fundamental ambiguity I find objectionable.

[4] Barthes, "Two Criticisms," p. 253.

In summary, views like these of Barthes and those of objectivist theorists reflect a certain two-valued logic in which literary discussions of hermeneutical questions proceed. The nature of interpretation is presented as either objective, in which case there is a search for a mythical "right" methodology which grants access to a definite, unchanging kernel of meaning, or the meaning of a text is judged to be radically plural and, in Barthes case, of secondary importance to the interpreter's on-going interpretative process. Polanyi's epistemological thought, of course, takes as its goal the project of recasting the critical philosophical heritage which has deified the two-valued subjective-objective way of perceiving the dimensions of human knowing; I believe that the present hermeneutical discussions among literary theorists which move between an objectivist and a radically pluralistic view of meaning are very much the child of critical philosophical presuppositions. In what follows, I attempt to draw upon Polanyi's post-critical ideas to present a view of interpretation which transcends the disjunction between the

---

[5] Barthes, "What is Criticism?," p. 253.

Despite Barthes' affirmation of the plurity of signification of the text, he does not -- strictly speaking -- view interpretation as subjective. He holds in his own peculiar structuralist way that criticism is both objective and subjective: it is subjective in the sense that the critic chooses the language/ ideology (e.g., psychoanalytic, Marxist, etc.) out of which he interprets, but objective in the sense that any chosen language is a possibility of the critic's era. ("What is Criticism?," p. 260ff.)

XUM

present terms for discussion. What emerges is a vision which affirms, but in a re-shaped pattern, certain convictions of theorists on both sides of the present dilemma. The purpose of these remarks is thus to describe the personal character of literary interpretation.

SECTION B:
THE INTERPRETER AS ACTOR

From a phenomenological perspective, a text and an interpreter are always already in relation; this primary relationship is the ground of interpretative acts. To say that text and interpreter are from the first in relation is in some ways to say no more than the obvious: texts are normally thought of as things that persons read. But the conception of relation also has a deeper significance than this. Though a given text may be unread, there exists no fundamental strangeness between the interpreter and text. Even if a person is unfamiliar with the language or symbols of a text, in regarding the piece as a text or a possible text, the most basic level of anomy has already been bridged. A text is always a concrete possibility already within the horizon of the interpreter as a person. The form of life in which an interpreter dwells already includes writing, written documents, the reading of such documents, and similar aspects of literate life, as a part of the particular web of action and interaction of the community's temporal and social location. An apprentice interpreter arrives on the scene already understanding for the most part the art in which he chooses to engage. The interpreting of texts is one of those activities, routine or special, for an interpreter which, as a form of human action is not unprecedented. It is this bond of initial sympathy between text and interpreter which is a subtle yet basic component of the structure of interpretation. The text is in a generic sense a part of the tacit awareness which an interpreter brings to his life in the world. Thus, to speak of either texts or interpreters presupposes a fundamental symbiosis between the two.

This phenomenal aspect of interpretation has semantic implications. If the text is always already primordially within the world of the interpreter, this means that the meaning of the text is already partially disclosed. It is not disclosed in the sense of a moment of revelation as when a light comes on but is revealed in the sense of being apparent or commonly known already by those within the community; it is an assumption of those participating in the patterns of action and interaction of a form of life. The extent of such disclosure is broad though it cannot appear so to those within the form of life. That which is disclosed has an active rather than explicit, reflective form; what is disclosed tells an interpreter how to elicit further, more particularized meaning from the text. A piece of accepted literature, a sonnet by Shakespeare, for example, by virtue of an interpreter's acceptance as both a written document and as a literary work, already discloses to the interpreter much of its meaning. The acceptance of the sonnet as an English written piece, as a poem, as a work of Shakespeare, etc. all delimit, each frame more strictly than its predecessor, the realm of legitimate response for an interpreter. It is in this sense, as regionalized, prevenient disclosure, that the most basic parameters of interpretation already are set in motion before the interpreter literally engages the text. Such disclosure is meaning tacitly known; it is carried in the tradition which an interpreter attends from in order to attend to a detailed, concrete understanding of the text. The meaning of a text is thus not created or discovered from ground zero but is founded upon an interpreter's preliminary tacit knowledge. Meaning in this sense is already circumscribed; it falls within a certain domain. The problem of interpretation is one of illuminating this domain.

To claim that text and interpreter are bound together within the horizon of the interpreter and that meaning is therefore always already disclosed partially is to presuppose certain definite ideas about who and how persons as interpreters are constituted. The remainder of this section attempts to acknowledge these presuppositions in a portrayal of the interpreter as an actor.

A human interpreter is a person and a person can be described as an agent or actor operating in a community of agents. Interpretation is an action of a person. This incisive way of putting matters clarifies little at this point. What is a person? What is action? What is an interpretative act? I shall try to begin addressing

XUM

these issues by describing three interdependent senses in which the response of an interpreter as a person in the world is active. A clearer conception of both action and of persons will thereby emerge.

An interpreter is an actor in the sense that his movement in the world is bodily in form. In an elementary sense, this means that a person's physical movements within the environment are executed by one or more of his body parts. But this is certainly the least significant sense both of human movement and of bodily form. In a more general and deeper sense a person can be seen as a center for intelligent movement both of the physical and symbolic type; either type elicits a response from other persons or the self and both have bodily form in a broad sense which I will develop. A person is a self-regulating organism with certain acritical powers of self-coordination and self-extension through which we have our being in the world. I shall refer to these as man's tacit powers and I mean to imply much the same thing that Michael Polanyi has suggested in his use of this term. We dwell in and integrate disparate particulars; we become focally aware of the whole on which such tacitly or subsidiarily known particulars jointly bear. Our tacit powers are thus the means through which our response to and our understanding of things happening around us or within us occurs. It is by coordinating the integration of that which we have internalized that we achieve complex, unified movement.[6]

The basic pattern of the person's movement in the world is one of becoming subsidiarily aware in order to achieve a focal performance or explicit understanding. This is the shape in functional terms that the utilization of tacit powers gives to human life. It is true that man shares this basic pattern with other animals though the range of control over his environment which these powers give man exceeds that of other animals. Man has combined certain possibilities of his tacit powers to produce his symbol-using ability. The weight of human culture is dependent upon and derived from human symbolic powers. Certainly when we think of interpretation, of interpreters as they deal with texts, we must think of man as a language user. It is important, however, to make clear that even when language is involved, the basic rhythm of the person's movement in the world is that of dwelling in that which must be understood or reacted to in order to transcend its diversity and actively grasp its coherence. This is the from-to structure of human living which human tacit powers ordain. The structure of interpretation as a responsive human symbolic movement has this from-to structure. In a preliminary way it should be apparent that that which is attended to (i.e., that which is the object of attention or consciousness) is a relationally constituted coherence dependent upon that which is attended from. Later, I shall suggest more about this from-to structure in terms of the specific nature of the interpreter's indwelling in the text in order to understand the various levels of its significance.

---

[6] Here and in the discussion which follows, I use the idea of dwelling in in order to understand and dwelling in in order to achieve a joint performance interchangeably. The former case is more directly associated with knowing as an activity in an environment with a developed language. The latter is more associated with physical skills and can be thought of as a more primordial form of human agency. I do not wish to convey the impression that I conceive of persons or of agency in terms of knowing as a sophisticated reflective activity. The joint performance formula is intended as an inclusive way of portraying human agency at several levels; understanding in a sense associated with cognition is to be seen as a type of joint performance.

Our efforts at dwelling in particulars are attempts at self-extension. The from-to method by which a person deals with his environment entails a constant use of particulars as subsidiary components aimed at the achievement of a complex objective. Any item which functions as a tool is a tacit component (or a tacitly known item); it functions as a particular attended from in order to achieve something else. In a sense the elements of the body are man's ultimate tacit components for they are always used to grasp the nature of or respond to that which is external. But the range of tools which function like the body as subsidiaries is very vast for articulate man. All such tools are means of self-deployment; they give us access to the complexity and depth of human culture and existence.

The habits of his culture and of his biological systems which a person dwells in are the fabric through which he understands and deals with the world. They are the means by which we act; like the leaves of an onion, they are the body of the actor. Our habits should be understood as tools or subsidiaries with which we make our way. I speak English as the language habitually used in the affairs of the society in which I live; in most instances of its use, my language functions subsidiarily for me, as I use it to respond to other persons or to understand a response from them. Habits like language jointly compose the tradition in which a person is rooted. In the next chapter, I shall describe the social character of this rootedness as it effects interpretation; here I want only to point to the function and possibilities of tradition.

In order to deal with his environment or even in order to be alive, a person always dwells somewhere. Dwelling includes biological and social location; it is in dwelling that persons internalize patterns of living by which they have their being. Social location provides us with the habits of tradition through which we act. In an epistemic sense, we come to make responses or to understand consciously only by virtue of already having a definite social world which has been internalized and which functions tacitly for us. Just as our innate biological habits are a gift by which we become sentient, the gift of the habits of tradition is a gift by which we become full persons.

Particularly early in our lives, we are in the process of building up a broad tacit field or horizon which we can bring to bear upon various situations. The response of a child in contrast with that of an adult often reflects the partial or incorrect assimilation

XUM

of the patterns of a community. We rightly speak of children and persons as sometimes lacking the tools required to deal with or understand a situation.

Tradition should not be understood altogether in the sense of a cultural milieu which a person internalizes in order to become somebody definite. It is true that we become persons by borrowing the habits of our setting which then become tools to be deployed with our own initiative; but this scenario does not imply that tradition has a static character. In the sense that we always attend from some tacitly known field, it is appropriate to say that human knowing is a traditional activity.[7] Knowing or, more generally, responding depends upon the tacit field carried by a person and this field is the tradition out of which he acts and understands the world. A knower attends to his current concerns by employing the tools used in the past, but in each successive use these tools themselves are reshaped. The tradition which functions subsidiarily for a person is an expanding fabric subject to our continual modification. The from-to structure of a person's movement into the world thus has a generative aspect and functions like a feedback loop (negative); like a child, a person uses his current horizon (i.e., his indwellt tradition) to expand his future field of tacit awareness. We reshape our being as we use tradition to attend to our concerns.

---

[7] See Smith's discussion, p. 201ff.

Tradition cannot be narrowly limited to a definite, unchanging set of habits but must include the modification of such habits as they are used; since this is the case, tradition and innovation are not, as they often are portrayed, antithetical forces.[8] Tradition as that which is attended from becomes the condition for any innovation. The tacit field out of which a person operates always holds potentialities for re-organization. In the action of the person attending from the tacit field, the field itself is modified; every modification makes room for additional future innovative insights into the nature of that which is attended to.

I have suggested that tradition is a set of habits used by a community as well as the individual's appropriation and continual modification of such habits as they function as the person's tacit ground or horizon. To think of an interpreter as an actor in terms of tradition emphasizes that from and by virtue of which a person acts. This remains somewhat of a passive constitutional description of a person. I shall turn to a discussion of skills as a way to delineate more concretely and actively the make-up of the interpreter as an agent.

An interpreter is who and how he is in a concrete, active sense in terms of the skills he has mastered. A person can be understood not only in terms of the pattern of habits he internalizes and modifies but also in terms of how such constituting habits are skillful

---

[8] Smith, p. 201ff.

XUM

in character. All of man's acting involves both knowing what and knowing how; these cannot except in an academic sense be separated in an instance of action. The skillful aspect of action is in the coordination or integration of diverse particulars internalized; it is by virtue of such coordination that unified response is possible. To know how to use a probe involves learning to attend to the terrain at its tip by attending from one's grasp of the probe. This is the from-to structure of action. The probe user must coordinate or integrate his various muscular expansions and contractions in order to attend consciously to what lies ahead. His skillful muscular control is a subsidiary through which his intention is achieved. The skills which we acquire are the tradition in which we dwell; they function for us instrumentally. As subsidiaries all skills are like parts of the body: we know them when in use in terms of the external items they clarify for us. This is the broad sense in which the movements of a person as an actor are bodily;[9] by dwelling in the skills which we have learned, we produce movement which expresses our desires and understanding. Some of the skills we use are so second nature that they are very like the physical body in that they are constantly used. Our language skills are such a primary skill. Within a community, primary skills are broadly shared. Other skills are more specialized and we tend to use them more infrequently; we slip in and out of such skills like a pair of shoes once they are mastered, using them only

---

[9] Above, p. 225.

XUM

when needed.

The particular matrix of skills which a person has mastered is always in the process of modification. An interpreter as skillful is always on the road to being someone else. Skills and combinations of skills generate new needs and new skills to answer these needs. The modification of the skillful self which is always in process is incremental in character. A person maintains self identity in different interpretative acts though this identity is subtly shifting. We normally speak of a person as skillful rather than as a set of skills; this rightly puts emphasis upon the quality of centeredness transcending and guiding the use and acquisition of skills but it should not imply that a skill is simply a neutral attribute or accident which can be separated from personhood. We are the particular complex of instrumentalities which we possess; they already express our capabilities for action and our valuing. To think of a person in terms of his skills is not a reductive functionalism but a holistic way to understand persons as agents. A person's skills make him an actor and a person in relation; our skills already reflect our valuing, since we have our being by submitting to our tools.

A preliminary summary of the preceding suggestions about the conditions for and nature of a person's action will focus the emerging image of an interpreter. The various foregoing ways of viewing action can be summarized by saying that human action has a from-to character; we dwell in particulars in order to achieve a focal performance or

XUM

explicit understanding. A person's movement in the world is bodily in form. Dwelling in is man's means of self-extension; our tools or skills are subsidiaries which we use like our bodies. We have such tools or subsidiaries which endow us with active capabilities because we have internalized the habits of our community. Tradition in the sense of the practices and assumptions of a community provides us with a place first and always to dwell through which our personal response to the enviornment is a possibility.

It is possible to draw out the implications of this way of conceiving human action from a new direction that suggests a second sense in which a person is an actor: human movement in the world is directed movement and not random motion. The directed character of human action ensues partly because persons are shaped in an interactive matrix which already expresses purposes and valuing; but the directed character of action is also partly the result of the responsibility which individual persons take for the from-to movements into the world in which they respond to the pattern of valuing which is their heritage. In both of these senses, action as directed expresses both the passion and the commitment of the valuing community and the valuing respondent person. A person as agent (as a directed or valuing center) is a dynamic pattern of commitments continually in the process of reforming its shape. To act is to express value as a temporal creature which entails the deployment of life space (*i.e.*, time understood not as a succession of moments but as lifetime) toward some purpose.

Finally, there is a third sense in which it is important to describe the agency of persons: a person is an actor in the sense that his movement in the world is intelligent. Intelligence is a defining characteristic of action, although this does not mean that all human movement is rationally or logically premeditated. Action is intelligent in that it is undergirded and sustained by understanding of either a tacit or explicit variety and led by the desire for further understanding. Premeditated action moves out of a person's focal understanding of the significance of some specific concern. But even this motivating focal understanding is grounded in and possible through a person's broad tacit field of knowledge. Not all action is intelligent in the sense of being an expression prompted by an act of focal understanding. Most human action is responsive in the sense that it moves from-to without a rational cognitive dimension. To ride a bicycle involves a predominantly tacit understanding of the elements which produce balance and forward movement. A rider integrates the particulars in which he dwells in order to produce a coordinated act. The intelligibility of such an act consists in its coordination and this coordination is tacitly learned as are all skills. The skills which serve to produce explicit understanding and premeditated intelligibility are themselves tacitly learned and have their own largely unrecognized kind of intelligibility.

Because skills learned inspire the development of new skills and new combinations of skills, there is also a futural sense in which the action of persons can be described as intelligent. Man is a creature with great capabilities for combining skills and generating new skills which can function as the tacit term of his from-to movements into the world; the potential field for understanding for man is thus extremely fecund. Since this is the case, it is appropriate to claim not only that action is intelligent because movement is grounded in a person's tacit coordination or explicit understanding of a situation, but also that action is led by a desire for further, more sophisticated self-coordination and understanding.

In summary, the general conception of an interpreter which is employed in this Polanyian view of interpretation focuses on the interpreter as an actor or agent. Interpreters as persons are actors in the sense that their movements in the world have a from-to structure. Human beings have tacit powers and the use of tacit powers is action. Such use involves the dwelling in and integration of particulars such that responsive movement toward the environment is released. The action of a person can be seen as grounded in his biological constitution and in the habits and tradition of a community which a person takes over and continually re-shapes. The most active way of interpreting the actional capabilities of a person is in terms of the skills a person has mastered. An interpreter is an agent not only in the sense that the use of tacit powers releases response to the environment but also in the sense that such response is directed response. Human movement expresses purposes and valuing both because the interactive matrix in which persons are nurtured is always a valuing matrix which is assimilated and because persons take responsibility for their movement in the world. Finally, an interpreter is an agent also because his movement into the world is intelligent. Action is intelligent because it is grounded in understanding of either a tacit or explicit type and because it is led by the desire for further understanding.

SECTION C:

TEXTS AS SENSE-GIVING ACTS AND STRATEGIES FOR SENSE-READING

The preceding section has suggested a general view of how an interpreter is an agent. Discussion in this section seeks to portray more specifically both the domain and nature of an interpreter's action.

Interpretation in the very broadest sense happens in any situation which presents itself to be understood. A text can be considered as one particular type of situation, one which involves a codified symbolic representation. The interpretation of a text is an action similar in structure to the interpretation of any other situation. An interpreting person must dwell in the particulars of both the linguistic and non-linguistic situation in order to respond to it or attend to its focal meaning.

XUM

As a linguistic phenomenon, a text is already a highly ordered piece. It must, to some degree, conform to the limiting principles governing linguistic representation. Languages employ identifiable and consistently used phonemes and letters which provide identifiable shape and sound to words, a relatively small common fund of words, and certain consistently used patterns for the combination of words. Those who use language artistically are, of course, famous for violating the canons by which orthodox speech is governed. Yet, even when a text violates conventions which make language function, it inadvertently affirms the ordered structure of language use; exceptions to the norm are meaningful by virtue of the very norm they violate.

As an ordered linguistic representation, a text requires of those who would understand it a certain type of skill. This is perhaps tautological: those who would understand written language must be able to read. Yet, there is more to skills than meets the eye. It is very difficult to define exactly what constitutes the necessary skill of an interpreter. It is apparent that skill involves knowing how to deal with the language medium. But it also seems that a skillful interpreter must have some type of sympathy or understanding for the interpreted world out of which the text comes. At this point, I want only to emphasize that texts and skilled interpreters are bound together. There would be no texts unless there were skilled interpreters and there would be no skilled interpreters unless there were texts.

Texts require skilled interpreters in order to be meaningful. Skills link text and interpreter. The disputed meaning of a text can never be verified by simple appeal to what stands there, because text, skills and persons always stand together in a dynamic relationship. Variations in meaning can be understood only by attending to the difference of skills or more broadly the tacit horizon brought to interpretative acts by different interpreters.

The symbiotic relationship between texts, skills and interpreters becomes clearer when a more general paradigm for language use is set forth. A text is an instance of written language usage. Oral language use is a more primitive form in the sense that the deep emotive/convivial relationships that ground a community are created in face-to-face contact and dialogue. Oral language usage involves the senses as a complement to symbolic form in a more direct fashion than a written text. Although the understanding of a written text lacks the immediately experienced situational fullness of dialogue, it does have its own unique excellences. The written word has both a kind of stability and a potentiality for ambiguity that the immediately experienced oral situation often lacks. The meaning of the written word is more completely present in thought than the meaning of either an immediately experienced perceived non-linguistic situation or an almost immediately experienced oral case of language use. This does not imply, however, that there is a radical distinction between a subject's everyday direct experience in perceiving or his semi-direct experience in understanding oral language and his more thoughtful understanding of a written text. Merleau Ponty is correct in showing how direct perception and the understanding of language are of a piece.[10] Polanyi argues similarly that the understanding and production of both speech and written texts and direct perception have the same structure; all language use is an extension of human perception.[11]

The way speech and writing is endowed with meaning and the way meaning is inferred from speech and writing are personal acts with a characteristic pattern. Polanyi calls this pattern the structure of tacit knowing;[12] earlier I have discussed this pattern in its more general form as the from-to or bodily structure of all action. Communication with symbolic forms written or oral has a triadic form:

> A person A may make the word B mean the object C. Or else: the person A can integrate the word B into a bearing on C.[13]

---

[10] M. Merleau-Ponty, Phenomenology of Perception, trans. Colin Smith (London: Routledge & Kegan Paul, 1962), pp. 183-84.

[11] See discussion above, pp. 49ff CF. PK, pp. 69-131. See KB, p. 189 for Polanyi's reflections on the distinction between immediately experienced perceptual meaning and the meaning of language present in thought. Polanyi does not, as I have, attempt to draw some distinctions between oral and written language usage.

[12] KB, p. 181.

[13] KB, p. 181.

An integration making B bear on C gives B a meaning that points at C. A lecturer, for example, points at his diagram and the audience looks *from* the finger *to* the diagram, the object of focal attention. It is by looking through or following the direction of the finger, the proximal term of the act of knowing, that we attend to the object of interest. The finger is not seen focally; our awareness of it is subsidiary knowledge, and it is by virtue of becoming subsidiarily aware of things that they are endowed with meaning:

> It is our subsidiary awareness of a thing that endows it with meaning; with a meaning that bears on an object of which we are focally aware. A meaningful relation of a subsidiary to a focal is formed by the action of a person who integrates one to the other, and the relation persists by the fact that the person keeps up this integration.[14]

The triadic character of communication which includes language use but is not limited to it thus includes: (1) subsidiary elements (2) bearing on a focus or distal objective (3) by virtue of an integration performed by a person.[15]

A writer, in making words mean something, engages in a sense-giving act. An interpreter, in integrating words into a comprehensive focal meaning, engages in a sense-reading act.[16] A text is both the product of a person using words or signs to embody some reality and an occasion for discovering embodied meaning. I shall use the term "linguistic strategy" to include both of these connotations. A text is a strategy for embodiment used by the sense-giver and a strategy for discovering meaning for the sense-reader. It is true that, since language is used broadly within a social context, the act of writing (of sense-giving) includes already an anticipated sense-reading, a seeing of the text as others will see it, on the part of the writer. In the same way, an act of sense-reading includes a kind of imputing of what the interpreter would mean if he were the sense-giver. Despite the fact that both sense-giving and sense-reading include a consciousness of their respective complements, each act remains distinct and the link between them is not unequivocal. The meaning an interpreter grasps in tacitly integrating the elements of a linguistic strategy cannot be in every case directly equated with the intentions of the writer. This will become apparent as some further distinctions about the kinds of meaning in texts and the kinds of linguistic strategies are established.

---

[14] *KB*, p. 182.

[15] *KB*, p. 182.

[16] *KB*, p. 181.

It is important to notice that the meaning of the proximal component or subsidiary term of an act of sense-reading (*i.e.*, the "B" from above) is different when it no longer is a subsidiary but is an object of focal attention. The pointed finger when focused upon as a meaningful entity (*i.e.*, as a "C" term or a comprehensive entity) has a different meaning than it has when it is a proximal term directing attention to a diagram. A word, particularly if it is a complex noun with many subtleties of association, has a different import when seen subsidiarily as it bears on the meaning of a whole sentence than it has as an isolated term.

This situation suggests that some distinctions about meaning need to be made. The proximal term of an integrative act is that which *has* meaning; we endow things with meaning by making them function subsidiarily in dwelling in them. A word which *has* meaning is assimilated to the body and functions like a tool to achieve an objective. That which *is* the meaning on which that which *has* meaning bears is the distal term of the integration. The pointed finger *has* meaning, and the diagram to which it points *is* the meaning on which it bears.

This appears to be a simple distinction, but it becomes confusing when applied to language usage. One difficulty with an attempt to locate what *has* meaning and what *is* meaning in an act of interpreting a text ensues from the fact that interpreting is a process that entails a whole generative series of expanding integrations occurring almost simultaneously. A word *has* denotative meaning when a person dwells in it (*i.e.*, makes it a subsidiary) and attends to that which *is* the entity it represents. But that which *is* this meaning also *has* meaning as it is internalized and made to bear on a larger whole such as a sequence of two words. This new distal term in turn becomes a proximal term for attending to a more encompassing meaning. What we first attend to becomes, in the on-going process of interpreting, that which we attend from. This combinatorial pattern culminates at least in a temporary sense, in the meaning of a sentence, a paragraph or work.[17] When we think of the interpretation of a text we must think of sets of cumulatively constituted wholes of meaning of progressively increasing circumference and of a series of triads composing them. The closure at each stage functions as the subsidiary foundation for attending to a more comprehensive whole on which it bears.[18]

The distinction between what _has_ meaning and what _is_ meaning can be used to show not only the generative structure of interpreting language but also the semantic complexity of language. Language use is orderly; it at least roughly conforms to certain principles which serve to make it effective.[19] Language use is also evocative; in delineating ideas, language also has the power to evoke other ideas or memories in the interpreter. Because language use is both orderly and evocative, linguistic elements can have two kinds of meaning. First, a linguistic element _has_ a denotative or representational meaning which _is_ the entity toward which the element points.[20] The word "dog" points to a type of animal. But a linguistic sign also may have a harmonic meaning which is the meaning it has as a sound, shape or idea forming a part of an already meaningful pattern. The word "cross," for example, has a denotative meaning which points to things set at a perpendicular angle. But it also has a harmonic meaning in terms of its invocation of a whole intrinsically interesting and meaningful pattern of ideas, feelings, etc. associated with Christianity. It is within this pattern that "cross" has harmonic meaning. The basic harmonic meaning of words in a text or

---

[17] One of the issues which structuralists like Barthes are raising is the danger of accepting any closure as final, since an interpreter is a temporal creature. See the remarks on Barthes above on pages 219-21.

[18] _KB_, pp. 185-86.

[19] See discussion above, page 52ff.

---

[20] Polanyi makes the distinction between wholes with denotational or representational meaning and those with existential meaning (PK, p. 58). The meaning of a word which points to another thing is an example of denotational meaning. Only contrived orders can have denotational meaning. A thing which means in terms of a context which itself is appreciated as meaningful has existential meaning. A tune, a physiognomy or a pattern have existential meaning. A pattern, for example, has meaning for a person in terms of itself and not in terms of that to which it points. An element in the pattern has its meaning in terms of the pattern. Both contrived and natural orders have existential meaning. The distinction I draw between denotational and harmonic meaning is substantially the same as Polanyi's distinction. I use the term "harmonic" in order both to avoid the term "existential" and to focus on the way elements fit into a pattern and have meaning in terms of the pattern. Polanyi never, to my knowledge, has made much use of this distinction, though he implies that the meaning of art is primarily existential. He draws a distinction between "physiognostic" and "telegnostic" meaning in a 1961 article which appears to be the same as this under different nomenclature in PK (KB, p. 128-29). The reader is cautioned that by "denotational meaning" I do not intend to imply that there is some surd of meaning resident in the language itself. I mean that which is first pointed to for the interpreter who attends to the language and possesses the requisite skills that are normative for understanding language in his social context.

XUM

in spoken language is normally not noticed except in speech or writing which a person responds to as an artistic use of language. But in even the simplest written or oral sentences, words have a meaning at the level of sound which is heard in terms of the relationship of one sound to another in a pattern. Such immediately experienced harmonic meaning is a readily appreciated feature of poetry. A reader who believes himself to be dealing with a linguistic strategy which is a poem is attuned to the rhyme and rhythm of words, even as he is attending to the representational meaning of words. But, as the example of "cross" suggests, harmonic meaning appears at a higher semantic level than that of immediately experienced meaning as a pattern of sound. That which is the denoted meaning (present in thought) may itself evoke another whole context which is intrinsically interesting and meaningful for the reader. The first denoted meaning becomes a subsidiary with which to attend to an analogical context and then its (i.e., the first denoted meaning's) meaning takes its place within the accredited evoked context.

A line from the work of the modern poet Wallace Stevens can be used to show in a more concrete fashion the character of harmonic meaning: "The only emperor is the emperor of ice cream."[21] To avoid the conclusion that the line has a nonsensical, trivial meaning, an interpreter must attend from what is the denoted literal meaning of "emperor" and "ice cream" to what is a plausible significance at another level. By dwelling in the denoted meaning and making it a subsidiary, the interpreter attends from its literal significance to another significance which it, as a part of a pattern, can have. What is the denoted literal meaning becomes what has another meaning which is a harmonic meaning. As the nature of metaphor has traditionally been stated, the reader comes to see the denoted meaning in terms of something else. The relationship between these two levels of meaning is provided by the reader's thoughtful experience; achieving a satisfying harmonic meaning depends on intellection and is not, like the relation between words at the level of sound, an immediately experienced meaning. When the interpreter comes to understand what are the denoted literal meanings of "emperor" and "ice cream" (as "ruling figure" and "sweet frozen dairy dessert") as what has harmonic meaning which is connotations about supreme principles and pleasure, he comes to understand the significance in terms of a pattern or harmonic meaning of the line: the pleasure principle is supreme.

---

[21] Wallace Stevens, "The Emperor of Ice Cream," in The Palm at the End of the Mind, ed. Holly Stevens (New York: Random House, 1969; Vintage Books, 1972), stanza 1, line 8.

It is probably not the case that in reading terse, metaphoric lines such as this that the reader explictly formulates a question such as what is an emperor of ice cream? or what do emperors have to do with ice cream?; such a procedure may, however, help in attending to the significance in terms of a larger pattern which the line may have.

XUM

The mind, particularly if it is acclimated to such evocative poetic techniques, operates quickly and bypasses such explicit questioning. What is important about such harmonic meanings is that they engage the imagination in a way that denotative meaning or meaning-in-terms-of-pointing usually does not. An interpreter must dwell deeply in a line in order to grasp its meaning in terms of a pattern it is a part of. Just as the meaning of a musical note really comes alive in terms of the accredited meaningful context of a tune, the meaning of a line like this metaphoric one first authentically opens up when the pattern of which it is a part lights up.

It is obvious by this time that the distinction established between what has meaning and what is meaning serves as a somewhat involved but logically clear way to deal with the dynamics of meaning of metaphor and the issue of analogical reading. All harmonic meaning is not, however, of the stark variety found in this metaphoric line from Stevens. A textual element can have harmonic meaning when its denotative meaning becomes an occasion for understanding a more general significance of a whole pattern of events. The reader of a novel, for example, understands the harmonic significance of a literally denoted or described action in terms of the shape of other action understood earlier in the text which makes a pattern. The particular presently grasped event takes its meaning in terms of a pattern. The whole which this inclusive particularized pattern constitutes can itself come to have harmonic significance as it suggests a more generalized or universal conclusion or pattern in which it is set. The Bear thus becomes an initiation story that at least partly tells the story of all its interpreters' lives and not just an account of a single fictive figure's youth.

The preceding discussion of the dynamics of harmonic meaning has shown how an interpreter deals with a text, but it has not established when a text has harmonic meaning. When is it appropriate to read analogically? Or, more generally, when do harmonic meanings come into play? This issue can be considered in terms of intentionality of a writer and his interpreters.

A text is the sense-giving act of a person. Writing is a skillful act in which a person employs an internalized conventional symbol system used in a community. A writer attends from a certain tacitly-known reality in order to produce an explicit symbolized representation. This involves the subsumption of more amorphous forms of feeling under a conventional concreteness. But this conceptual subsumption involved in calling forth a word is not so much an explicit premeditated conscious act as it is a reflexive bodily movement. Writing is expression. Just as we use the handle to open the door, we use the word that is a part of our repertoire; the word is an aspect of the tacit horizon in which the writer has his human being and it is pre-reflectively called forth though each new act of use modifies the meaning it has within that horizon.

XUM

A text as a skilled act of sense-giving embodies a tacit meaning in a formalized linguistic strategy. Different types of texts are different types of sense-giving acts and manifest different sorts of linguistic strategies. If a writer intends that his text satisfy certain informational needs, the formalized linguistic strategy created to embody his intentions strives for a well-organized clarity. The writer who intends that his work be regarded as a work of art stands in a different relation to his expression than do other writers. His sense-giving act is not unilaterally aimed at giving sense; it is a multilateral embodiment of meaning because as a strategy it aims both at embodying a denotative meaning and at calling attention to the harmonic potentialities for meaning which the strategy in itself will have. In this sense, writing that aims for a reception as art does have about it a more than normal self-consciousness; the act of creating literature is a bodily or pre-reflexive expression which turns upon itself in self-scrutiny.

If the intention of a writer is to produce a text which will be recognized as literary, he must fashion a strategy which will call attention to both the denotational meaning and the harmonic potentialities of language. How is this done? Obviously, there are many conventions that a knowledgeable writer can employ to frame a linguistic strategy which will tell an informed audience that the text is to be treated as an artistic use of language. Such conventions range from how the text is packaged to the types of vocabulary and sentence

XUM

structure employed. Such conventions may be quite specific in marking the boundaries within which a text will operate. To write in iambic tetrameter verse form, for example, both marks a piece of writing as poetic and a comic. Conventions such as these change over time; it is truly innovative writing that seeks to be artistic by re-shaping the prevailing poetic.

This discussion of writing, in suggesting that literary language is the domain in which harmonic meaning is important, has only suggested the obvious. It remains, however, impossible finally to define literary language in terms of the intentions of a writer and the formal features of the linguistic strategy he creates. The writer depends on his interpreter's sensitivity to conventions but it is, in the last analysis, the intentionality (usually evoked by such conventions) which an interpreter attributes to a text that opens him to harmonic potentialities of the strategy. To a certain extent, an interpreter may self-consciously invoke a literary intentionality for any text: we may read the newspaper as we would a poem if we choose to do so. Harmonic meaning can be found in any text. This does not in any way diminish the stature of the particular body of texts judged as rich in harmonic meaning by a whole tradition of interpretation; neither does it imply that interpreters should treat all texts in a way to recognize their harmonic potentialities. At a practical level, only chaos would follow from this. The literary response would become normative and our ordinary interpretative experience would become trans-normal. The fact that harmonic meaning can be found in any text simply reflects the rootedness of interpretation in the person.

Finally, the issue of the appropriateness of harmonic meaning must be considered. The previous discussion has argued that language innately has potentialities for harmonic significance and that interpreters discover such significance when they respond to a text as an artistic use of language. Does this view of interpretation not open the door to subjectivism? Is it possible to affirm the appropriateness of analogical reading and maintain that a text has a relatively definite meaning?

This question can be answered affirmatively only by showing that interpretation is a triadic and not a diadic act. Interpreters are not isolated individuals, but are figures operating in the context of a community. Different persons interpreting the same text are in most cases persons similarily constituted because they act in the same interactive matrix. Put in another way, it might be said that texts in a way select their own interpreters and this selection assures that the meaning interpreters discover in the text will fall within a certain domain. If I interpret a line such as that previously quoted from "The Emperor of Ice Cream" as I have, this does not mean that the analogical meaning which I find will be one which other interpreters will find implausible. It seems to me quite likely, in fact, that if most readers of this dissertation studied

Stevens' line in the context of the whole poem, they would discover an analogical meaning for the line which is at least similar to my suggestions about the supremacy of the pleasure principle. The text has already selected a certain kind of interpreter insofar as its readers are those English speakers who read and are to some degree familiar with poetry, are concerned with art, or are concerned with philosophical problems such as interpretation and read dissertations such as this which encourage them to consider works of art such as the Stevens poem. It is thus the similarity of readers as participants in a common universe of discourse which is the often unnoticed but nevertheless primal fact of interpretation; such similarity prevents semantic harmonic meaning or analogical meaning from being purely individual meaning.[22]

To make claims about the similarity of interpreters in no way denies that the apprehension of meaning, analogical or otherwise, is a personal act; interpretation is always the creation of a personal integration of the elements apprehended and a discovery of their conjoint significance (hence, I speak of meaning as "created/discovered"). All meaning is personal meaning; persons are the pre-condition and means by which a text has significance of any sort. But to claim that interpretation is personal is not to claim that it is subjective. It

---

[22] Chapter 7 deals at length with the sociality of interpreters and the issue of how meaning in a text is personal but not necessarily identical among interpreters within the same community.

XUM

is an unfortunate accident of the history of Western thought that the personal has become equated with the subjective and is seen in contradistinction to the objective. The assessment of interpretation presented here presupposes: (1) that there is no such thing as the "objective" meaning of a text, although there are textual meanings that are broadly agreed upon by interpreting persons; (2) that there is no such thing as a "subjective" meaning of a text, although there may be personal meanings asserted as legitimate which most interpreters would regard as whimsical constructions reflecting an irresponsible treatment of the text.

SECTION D:

THE TEXT AS A COMPREHENSIVE ENTITY BEARING ON REALITY

The last section focused on the text as a skilled sense-giving act and as a strategy for sense-reading; both sense-giving and sense-reading have the from-to structure of tacit knowing. Interpretation of a text is an act of sense-reading; some further distinctions between types of texts were established on the basis of the kinds of meaning which the interpreter's intentionality allows him to attend to. The present discussion seeks to summarize some of the ideas presented in the last section from a slightly different perspective; I shall present a text as a comprehensive entity bearing on reality.

As a strategy evoking meaning for a person, a text functions in a way that shows its relational constitution. The sense-reading action of a person is cumulative. An interpreter attends from a word to what it means and then this discovered meaning becomes a part of that he attends from to discover the meaning of the second word. Predecessors condition the meaning of units linked in a series. It is the interpreter who comes to understand the meaning of linguistic symbols linked together; he makes the symbols bear upon the components of his and his community's form of life. Because sense-reading is a cumulative act in which a person makes the text meaningfully bear directly or indirectly upon his own existence, a text can be called a comprehensive entity bearing on reality.[23]

A text is a comprehensive entity bearing on reality because it becomes meaningful for persons. A literary text, however, is a special type of comprehensive entity. When an interpreter responds to a language as an artistic use of language, the language has both harmonic and denotative significance. The literary text is thus a comprehensive entity in the double sense that it unites the denotative significance of its parts and that it unites a broad range of harmonic meaning which it evokes. Because it evokes contexts other than its

---

[23] Polanyi uses the term "comprehensive entity" to apply to any focally observed or understood entity. I am applying this specifically to the text in order to stress both the inextricable tie between text and interpreter or persons and the way the text is a relational embodiment of meaning apprehended in time.

XUM

denotative context, a literary text remains an ambiguous, persistently interesting linguistic phenomenon. When an interpreter attends to the harmonic potentialities of a text, the text becomes an inexhaustible meaningful form. It is empowered to engage the imagination and involve the person in its meaning at a depth that linguistic forms which are responded to at only a denotational level rarely have.[24]

To conclude the opening component of the Polanyian view of interpretation presented in this chapter, an integrated summary of claims made thus far follows. I began with a description of the interpreter as an agent by characterizing the nature of personhood and agency in terms of the from-to pattern by which a human being is being in the world. I showed how this from-to movement of a person is directed movement in the sense that it is a constant expression of valuing and purposing. I argued that human action as directed from-to movement is intelligent because it is supported by either tacit or explicit understanding and led by a desire for further understanding. The second section of the chapter moved from this general philosophic discussion of an interpreter as a human agent to a concrete view of a text as it is related to persons. A text is a sense-giving act of a person which involves a skillful subsumption of forms of feeling under linguistic symbols.

---

[24] Discussions in the next two chapters on the social, temporal and impassioned nature of interpreters explore further the suggestions made here.

A text is also a plan for evoking meaning for those with the requisite skill. I use the term "linguistic strategy" to include both of these significations. The way that a linguistic strategy is endowed with meaning and the way meaning is inferred from speech and writing are personal acts with the same from-to structure that I suggested all human action possesses. Sense-giving acts are those in which a person allows a subsidiarily held item to be embodied by something else. Sense-reading acts or interpretation involve a person attending from certain subsidiarily known or internalized particulars to what they mean conjointly. Both sense-giving and sense-reading have a triadic form which includes subsidiary elements bearing on a focus by virtue of an integration performed by a person. The sense-reading triad can be further described in terms of meaning. In understanding acts there is always that which *has* meaning (*i.e.*, that which an interpreter dwells in or knows subsidiarily) and that which *is* meaning (*i.e.*, the focus or distal term of an integration). These simple distinctions become very complex when applied to the case of linguistic understanding for two reasons. Reading is a cumulative act, therefore that which *is* meaning at one moment in the reading experience becomes that which *has* meaning in the next. A reader focally understands the meaning of a word and then allows this meaning to become a subsidiarily known particular used to attend focally to the meaning of the next word. Textual interpretation involves sets of cumulatively constituted wholes of meaning of progressively increasing circumference.

The second difficulty in locating what has meaning and what is meaning in language use ensues from the semantic complexity of language. Language use is orderly and evocative. It has two kinds of meaning which can only with difficulty be distinguished. A linguistic element has a denotative meaning which is the entity toward which the elements point. But a sign also has a harmonic meaning which is the meaning it has as a sound, shape or idea in relation to other sounds, shapes or ideas. Harmonic meaning is present in all language but is attended to only in language believed to be artistically employed. In artistic writing denoted meaning becomes a lure for harmonic significance; what is denoted becomes what has harmonic significance.

The distinction between what has and is meaning and its use to make a further distinction between denoted and harmonic meaning serve ultimately to affirm an analogical view of the interpretation of artistic language. This raises the issue of when it is appropriate to read analogically or, differently put, what is artistic language? I have suggested that a writer announces his intentions for his text through the use of conventions. If a writer desires that his work be responded to as an artistic use of language (i.e., if he wants his audience to read analogically) he employs devices that will key his readers to this fact. An interpreter's familiarity with tradition usually is his guide in shaping his own response to the text. It is, however, impossible to define artistic language at the level of formal

XUM

features. It is the intention of the interpreter (usually evoked by conventions) that opens him to the harmonic potentialities of a linguistic strategy.

Finally, in the second section, I addressed the issue of the appropriateness of harmonic meaning and analogical reading; does an affirmation of the harmonic potentialities of language open the door to subjectivism? I suggested that the affirmation of analogical meaning does not mean a text can mean anything an interpreter desires. Those who responsibly struggle with a text in almost all cases come to at least roughly similar conclusions about meaning; it is the similarity of readers as social creatures that is the primary fact of interpretation. It seems to me no longer fruitful to attempt to conceive of interpretation in terms of the subjective-objective dichotomy. Interpretation is better understood in terms of the social and personal (the two are not opposed) components of interpreters.

In conclusion, by way of summary, I suggested that what I have presented as the structure of interpretation and the nature of meaning is brought together in the idea of the text as a comprehensive entity bearing on reality. This view emphasizes the relational character of meaning as it is appropriated in a person's act of integrating various elements. It stresses that we can think of interpretation only in terms of persons whose modes of being create the text's efficacy and bearing upon the form of life they share. In the next chapter I shall turn directly to a consideration of the social nature of the interpreter and interpretation.

XUM

CHAPTER VII

INTERPRETATION AS SOCIAL AND PERSONAL ACT

For the most part, the foregoing discussion of interpretation has focused on the nature of human action, the nature of interaction between person and text, and the nature of the text and what it requires of and makes possible for an interpreter. The following discussion expands these considerations by examining the social and personal character of interpretation.

SECTION A:

THE INTERPRETER AS LIVING, HISTORICAL PERSON

> To ask how I would think if I were brought up outside any particular society, is as meaningless as to ask how I would think if I were born in no particular body, relying on no particular sensory and nervous organs.[1]

Man is always born into a fabric of living which already has shape, movement and direction before he comes to consciousness. In fact, it is by virtue of the already extent definiteness of his community that a child comes to consciousness. The infant slowly assimilates some of the patterns of the nursery. The biological need for food is slowly shaped into a habit satisfying not only physical but also evolving social needs for touching, caressing and loving. Such rudimentary habits constitute the baby's world and become the tools through which his world expands. The nurture of others provides the opportunities through which such habits are established and, once established, they become the point of familiarity (*i.e.*, the "ground" in the "figure/ground" sense) through which the new can be appropriated. By primordially understanding the habitual in the sense of living within its pattern of expectation, the infant is able to recognize and eventually assimilate that which frustrates the expectation and alters the pattern of satisfaction.

---

[1] PK, p. 323.

The child thus always lives in a world that is expanding, a world in which the unexpected breaks into the routine but soon finds its own place. Such a world is a bodily world; at first it impinges, uninvited, upon the senses but, as the infant grows and gains some control over his muscles, the body becomes an instrument with which to explore the environment. We gain control over the body very gradually and the pattern by which we become physically coordinated is the same strategy by which our larger social world later becomes a familiar environment and our being in this world becomes a coordinated activity. The infant "sees" the world before him at first as an undifferentiated whole whose "objects" have the same unidentified particularity that an adult's contemplative vision of a landscape in which nothing in particular is the focus. The infant sees only colored patches at no particular distance which are undergoing perpetual transformation in size and shape. He lacks the skill to focus in the sense of seeing an image sharply defined against a background; he does not control his world in a primordial intellectual sense because he cannot integrate the control of the organs which allow direct examination and identification of external objects. He gains this integrated control of the organs governing vision by practice. Vision is thus a skill slowly acquired which in its achievement includes a tacit affirmation of a whole new order lying beyond that which had been seen before. The colored patches first seen were merely an aggregate of impressions but in the coordinated act (i.e., the active shaping) of seeing which the child learns they became a subsidiary element which with other subsidiaries produces the perceptual order.[2] The pattern of learning to coordinate diverse elements to produce a joint awareness seen here in the case of vision is repeated in all the processes of human living. The small, safe world of the infant tumbles like a snowball toward the complexity of the world in which those who nurture him act. The achievements along the way such as the recognition of the perceptual order become the basis from which further skills which make living more complex are developed.

The discovery of texture, taste, color and shape all indicate that the world of the breast and bed is being challenged to include a myriad of particulars. By the time a child walks, he has achieved an at-homeness dwelling in his body; he clearly understands how to use his body to manipulate that which is external. Mobile explorations further challenge the satisfying familiar web of objects, functions and people in which he lives. As he begins to imitate the actions and gestures of those around him, his world further differentiates; that which is tried on in play without intention he discovers how to use in seriousness. He learns to be a part of the larger pattern of interaction among those persons and the environment which surround him.

---

[2] My discussion of perception and its implications follows PK, pp. 98-99.

By the time a child learns to speak, he already is familiar with a world of considerable scope. This is a personally-known world because the child already knows himself to be an experiencing center distinct from the objects, people and patterns of his environment. But this world is also a common world. The objects to which the child attends are objects to be shown to others; the functions which constitute the world of the child, the routine of bath and feeding, are rituals that necessarily include others. Through the action of others, the world which the child appropriates begins as a common functional significance. As the child masters the components of rudimentary physical coordination, the skills he begins to develop become more social in character. Such social skills are built upon the foundation of bodily coordination and include physical skills as lower components of their execution. The learning of social skills has the same form as learning effectively to use the body. The child must practice in order to master the joint performance of several actions just as he had

XUM

to learn through repetition and active striving to coordinate the several elements of his visual organs. Speaking requires both the projection of sound and the shaping of words which are meaningful to another. The child learns to attend to the meaning he projects by attending from the elements involved in speaking; he becomes subsidiarily aware of his sound projection and shaping as it bears on his meaning. In mastering the integration of elements that produces a social skill such as speech, the child more deeply establishes his presence in a common world. To develop sophisticated integrative skills is to develop further, more sophisticated habits by which he is a person in the world. In learning further to share the behavioral habits of those around him by developing social skills, the child deepens his tacit commitment to the common ways of integrating experience.

What speech adds to the child's world can hardly be overestimated. In vocal imitation the child learns slowly to apply names to the objects and functions of his environment. His perceptual grasp over items and events receives definite boundaries which means that the pattern in which he lives gains identifiable particularity. He learns to stabilize the dynamism of the world of pre-linguistic experience in learning to apply the same name to situations which differ in aspect. In learning to speak in sentences, the child learns how to use language just like his body as an instrument to rely upon in exploring the world. But he is unprepared for the assault upon his assimilated order of life, his locus of familiarity, which language use brings. The horizon in which he lives expands as quickly as he can absorb the new. The circumscribed order of habits and perception which is the child's world becomes an authentic theory of the universe through language use. The basic horizon which the child has generated in the routines of nursery and home through which experience takes shape is radically differentiated and enriched. As the child becomes a competent speaker and later a reader, he achieves a complex, pre-reflective awareness of the intricate ways, memories and hopes of his people. In using language to become fully involved in the life around him, he internalizes the patterns of valuing and loyalty which give shape, movement and direction to the community into which he was born.

Life after the acquisition of language to a large extent repeats the basic mode of pre-linguistic life. Though we come to live in a world of complexity, our involvement has the same from-to dynamic. We use the habits in which we dwell which now include the theory of the universe provided by our language to interact with our fellows and our environment. Our bank of skills and our realm of familiarity are constantly expanding and reforming themselves. We achieve a certain self-confidence and self-consciousness. Situations which we encounter do not conform exactly to expectation but we are able to reinforce the patterns in which we dwell by allowing the novelty we encounter to loosen our grasp on things and expand the horizon from which we attempt to find meaning. This is the pattern of our lives. We are always involved in acts of dwelling in who we have been in order to break out of this past subtending a future, and deal with the present subtending a new future. In this sense, our living is an endless act of interpretation.

As a person becomes mature, the sequence of dwelling in and breaking out rarely has the dramatic consequences which challenges to the world of a child hold. The world of the adult is highly differentiated and the expansions and shifts in the horizon of a person are rarely like those of the Apostle Paul which can be described as a rebirth. Even though the adult's horizon is relatively stable (partly because it is highly differentiated), the interaction of a mature person with his environment depends, just like the child's, on his continuing faith in others and the human world jointly constituted. For a child, the process of dwelling in and breaking out, of expanding one's horizons in learning the nature of his bequeathed form of life, is strongly dependent on the nurture of others. It is the child's trust in the rightness and meaningfulness of the actions of others that elicits his response and allows the learning of all the skills which are used in common life. The responses and skills which the adult has learned and which make him a person living within a sophisticated horizon carry always within them this trust. Trust in the meaningfulness of others' actions and the common world constituted by these actions is thus primordially built into what it means to be a temporal being. For a person to divest himself of such faith would require that he divest himself of the patterns of expectation in which and by which he is a person. It is impossible to be a person as a skilled, definite pattern of involvements subtending a future, apart from having trusted and continuing to trust. To say that we live with faith in others and with faith in the shape of things created in past faithful living is to say no more than that we are persons.

As persons living in a common world, we are nevertheless individuals. This does not mean that in some absolute sense we differ from every other person, but that we differ from persons who already are a great deal like us. In acting toward a common world, we already resemble those who are closest to us. We speak the same language; the basic skills through which we interact are already alike. Our involvements in the sense of our valuing and loyalties are already much the same at a primordial level. These are the constituents through which we are able to act in a common world which becomes common by virtue of our joint common action. By adulthood such elements of commonality already have become so second nature that it is difficult to notice that they are broadly shared by those in the community.

Yet, individuality prevails within this environment of common instrumentalities and involvements. The similarities of persons exist at a certain level, but they leave open possibilities for further definiteness. Diversity among persons thus exists within their dominant unity. The sources of such diversity are themselves social. The series of encounters in the world through which a person

XUM

creates the tacit field in which he dwells and out of which he acts (i.e., through which he is) is never quite the same as the encounters of another. Every culture is itself broken into a myriad of subcultures; such subcultures are both the result of the diversity of persons and the producers of new diversity. The patterns of living of one child's family are never exactly like those of another. Even among siblings, the series of events that shape children are not the same.

But the creation of individuals is not a passive thing. Our diversity has biological and social roots, but these become actual sources because a human being is an experiencing center; we actively shape our own experience. My appropriation of the common world is my own. I, to some degree, decide how the other which I encounter becomes a part of myself. It is predominantly on the basis of feeling that such decisions, which are therefore largely tacit decisions, are made. A diversity of appropriation of the common world thus occurs among persons even though the use of similar tools for appropriation sets the limits within which such diversity must stand.

Because I am an experiencing center, I have the opportunity to integrate my encounters in ways that express my being in the common world as a personal form of worldish involvement. My personhood is not that of another, though with our common tools created by and creating our common world I can, to some degree, dwell in and understand

XUM

the fineness of feeling that belongs to another. The possibilities for human being that another has concretely realized are possibilities which, though I may be able partially to understand, are closed to me because of my own personal history and ensuing concreteness. The definiteness of a person's being in the common world is always his own, though such definiteness created at its most fundamental level with common tools in a common world, is never altogether beyond the scope of another's understanding and sympathy.

The definiteness of persons as living, historical, individuated creatures thus means that our interpretations of the on-moving world are enriched by the color of personal beings. Our basic tools are common tools; the world such tools open is a common world. But the intricate pattern of feeling and awareness that constitutes a person, though it shares much with those with whom he interacts, is his own. It is this pattern, functioning as a tacit field, which a person brings to bear upon the situations he encounters. His understanding, whether at a conceptual or a behavioral level, includes the particular coloring and tone that is his own, though such understanding falls within boundaries which social living has pre-ordained. Interpretation can be seen as neither a solipsistic act nor as the act of a rational animal programmed with tools which produce a univocal, common outcome. Man is a creature living within a community created by common tools, values, and loyalties. But he is also a person who must integrate his own experience, drawing upon his own feelings and his own at least partially unique history. We exist in a state where we can understand one another (though at times this requires strenuous efforts) and at the same time understand that we do not always understand the same.

I shall call this state the relational relativity of interpretation. I mean by this that interpretation is relative to persons and persons are relative to one another -- that is, in relation forming a community. Whatever divergences there are in the way persons respond to a situation are divergences that can be adjudicated in dialogue which itself is a possibility founded on the primordial already constituted relationship of persons within a system of action. Interpretation is thus a personal act within a community.

Once stated, this vision of the relational-relative nature of human interpretation must immediately be amended to account for certain of its simplisms; a set of contrasting scenarios shows the boundaries of this conception. Persons living within the same pattern of action have much in common; differences between their interpretative acts already have available a universe of discourse which can serve to convey differences of perception. Persons living in patterns of action whose shape and direction are similar but not altogether complementary have less in common; conversation is more difficult because, lacking a common tacit ground, assumptions must often be explicitly laid forth. A universe of discourse must be created. Finally, persons living within action systems which embody widely different valuings and loyalties find it very difficult even to grasp the problems and issues faced by each other. As Polanyi's consideration of the Azande shows,[3] the pattern of social interaction in which a person participates shapes his sense of plausibility and his whole understanding of himself and the world. A common ground for discourse is almost completely lacking between persons with radically different perceptions of reality. The communities in which we dwell continually reinforce, even while subtly reshaping, the habits we have learned by dwelling in them; we have no avenues to approach the concerns of the other except those provided by the action system in which we dwell. In cases of widely different backgrounds, the interpretations of persons cannot really be compared and it is only the factor of interest in the perceptions of another that can prevent an encounter of such persons from becoming a mere passing of ships in a dark night; interest, nurtured into a commitment to the long process of learning the habits of the other's frame of reference, may make some intersubjectivity possible.

The relational relativity of interpretation thus is a phenomenon to be seen predominantly within the context of a community. For persons rooted in a common action system interpretative experiencing is personal but not private; we can communicate about our understandings and yet recognize their diversity. When the ties binding persons together as social creatures are more tenuous (i.e., less satisfactorily articulated at a tacit level) it is more difficult to recognize the commonality and divergences of response to the world. It is a constitutive aspect of man's interpretations of the world that they occur from within one or another system of action and that such action systems include many people bound together by similar skills, valuing and loyalties. The system is therefore self-reinforcing even while constantly modifying itself by increments. Interpretation happens in social process and different historical social communities must be recognized as authentically different action systems. As a complex interpretative matrix, an action system thus has a circular character: any single aspect of the system presupposes the other aspects from which it receives its justification. The logic by which we judge the validity of interpretation is itself rooted in its user's acceptance of his and his social companions' form of life.

---

[3] PK, p. 286ff.

SECTION B:
INTERPRETER AND TEXT

The preceding section has focused on the interpreter as a person who comes to consciousness as he is shaped by those around him. He comes to share the values, loyalties and skills that make him an effective agent in a community of agents, yet he remains a personal center of experiencing whose grasp of situations expresses his own perspectival being. His response to the world is his interpretation of the world; he brings his tacit awareness of his previous experience to bear upon the new in order to understand it. Both the socially constituted world and its participant individuals are through the process of interpretation at large constantly reinforced and modified. Interpretation as a phenomenon is relative to persons who are in relation to other persons in social process; it is a personal act to be understood in the context of a community. The present discussion seeks to take this general description of interpretation and apply it more specifically to the case of textual interpretation.

Textual interpretation is a special case of the interpretation that goes on all the time in a person's life. At the beginning of the last chapter, I suggested that in the interpretative situation the fundamental link between text and interpreter is already established; the text already has a place for the interpreter as a potentially sensible entity set in a relation to a whole context of such entities. The text has been already primordially disclosed to its recipients, and it awaits the realization or elucidation of its specific domain of meaning in its engagement by a person. Within this primordial relationship between person and text, the act of creating meaning for the linguistic strategy is an encounter of different locations. The text manifests itself as an entity coming from its own locus. The text is an original sense-giving act which has entered the public domain;

XUM

it lives by being interpreted and reinterpreted. The text, nevertheless, has a certain quality of resistance about it; it is not an infinitely malleable Rorschach diagram but is accepted as an exterior entity with its own integrity and its own power of speech. If the social location from which the text springs is far removed from that of its interpreters, a text may present itself as an enigmatic or strange entity; it gives sense in a way that is difficult and disquieting. It speaks of a world that is no more or of a world that stretches the imagination of its interpreters forcing them to transfigure their own normative assumptions in order to appreciate its embodiment of life.

Since a text lives by its interpretation, its powers of articulation are not altogether finite. As a written document, it is true that the text has spoken. Yet, because a text passes into many hands, it continues speaking. This is the case even with a single person who continues to study a text or who returns to a text after a period of time. A text, particularly one accepted as a literary text, continues to reveal itself; it looks to the future for its possible significations. This, of course, does not appear to be the case with most simple texts (newspapers, instructions sheets, etc., for example) which are quickly consumed and forgotten. We engage such uses of language with a certain disinterested curiosity; they are a mere stage along the way to some other activity. Because they lack interest, their potential to continue speaking is rightly

XUM

ignored. In summary, the general demeanor of a text can be focused in three aspects. First, a text is an entity which is not fully indeterminant; it is an alternative location to the interpreting subject in that it has a certain external, self-presenting character; it is not a Rorschach diagram but a speaking entity. Second, a text is not fully determined because as a written form it lives by being interpreted and reinterpreted; it continues speaking in revealing itself diversely in different interpreters and times. Finally, a text is potentially meaningful; it can be understood by those who engage it, although its mode of speaking may challenge the presuppositions of its hearers.

A text has certain powers and a certain externality which operate in the interpretative act; similarly, an interpreter can be described as bringing to his treatment of the text a certain definiteness. The preceding section has shown how personhood takes its form in a certain biological and social location. Who we are and where we are inextricably are tied. The definiteness of personhood which is brought to bear in the interpretative act can best be described in terms of the skillful character of the interpreter. To understand the identity of an interpreter in terms of skill should not be taken as a reductionistic approach to personhood and interpretation. Our everyday conception of skill is far too narrow. Human being is skillful being and a consideration of skill should be seen as a dynamic, holistic way to represent personhood. Skill is a process or way of being; this process can be broken down into distinct elements -- what we normally call skills -- only by seeing these elements atomistically and thereby losing the sense in which they flow together.

An interpreter's skill is his potentiality for action; it is the modus operandi of his being brought to an encounter with the text. This view does not deny that textual interpretation includes certain distinct skillful elements but it affirms that these elements flow together with other elements in making up a person. We achieve our skillful being in the slow process of coming to maturity in a community of skillful persons. The preceding section showed how man slowly expands his repertoire of skills and his stature as a skillful worldish creature. Elementary physical coordinations are the foundation of human life which are metamorphized in continuous stages into sensitive, aware personhood. Lower level skills are used to generate more sophisticated abilities which rest upon their predecessors but also add particularity and possibility to the fund of tacit knowledge used in experiencing. Skills are interdependent and flow evenly together to make up the whole of the capability for intelligent response recognized as a person. The conceptual assumptions or background of an interpreter cannot but in a very artificial sense be separated from the more elementary social and physical coordinations by which such background was achieved and is sustained. We live in our bodies and that which we can or have come to have bodily control over is the mark of our capability and power. To know that there was a tradition of the revenge play in terms of which Shakespeare's Hamlet can be understood is an aspect of the interpreter's skillful being in just the same way that a reader's ability to attend sequentially to words in a line is a part of skillful being. It is, of course, such particular aspects of our skillful being as these that make up our literate being. But such capabilities obviously employed directly in textual interpretation which can be isolated and spoken of as literate skills must always be understood as united with the other skillful aspects of personhood. Our literate skills are dependent upon and integrated with all the other capabilities which make us a coherent active being. In summary, to speak of the identity of an interpreter brought to interpretative acts in terms of his skill is a holistic and dynamic way to portray the interpreter's being as a being-in-the-world.

The foregoing discussion has suggested that both text and interpreter enter the interpretative arena as entities with certain identities or powers. The text is an external symbolic representation, a possibility of speaking to those who would hear. The interpreter is a skillful person, an in-the-world-being who can bring his tacit powers to bear in understanding the speaking text. The interaction of interpreter and text is an act of shaping meaning. It is an act in which the interpreter dwells in the particulars of the text using his skill and attends to their joint significance. A simple example illustrates the structure of this process of integration: "She muttered something in my ear I've forgotten as we danced."[4] As it appears, this sentence presents itself as a simple declarative utterance. A reader comes to understand this utterance by focusing on the first word, that nearest the left margin, and attending to its and each succeding unit's significance. The reader's skill is already involved in his act of focusing in recognizing that he is dealing with English; he knows to begin at the left margin and he carefully distinguishes between the different units of significance. The reader first attends to the characters in the area of vision and recognizes them as an English word; amost simultaneous with this action is the act of attending from what is recognizable as an English word to what it means. By skillfully attending from his previous reading experience which includes acquaintance with pronomial referents of feminine gender to the meaning of the recognizable English word before him, the reader makes the word "she" bear on reality. As the reader discovers the realm of significance for the first word, his attention flows directly toward succeeding words. The significance of that formerly attended to becomes a part of that now attended from in order to understand succeeding units of the sentence. The meaning possibilities of succeeding units exist in the margin left open by the accumulating significance of predecessors. But the greater specificity realized in moving through the chain of units also fixes more definitely the reference of earlier units. The meaning of the first word as a general feminine pronomial referent left open several possibilities which, as the first word is made to bear upon the second, are eliminated: when the reader understands the word "muttered" the possibility that the "she" referred to anything other than a human being is eliminated. In summary, this view of how an interpreter shapes meaning in a text emphasizes how his skillful being allows him to move progressively through the text in generating successively more encompassing and specific wholes of meaning. To understand the text involves the integration of parts successively attended to.

---

[4] John Berryman, "Her & It," in Love and Fame (New York: Farrar, Straus and Girdox, 2nd ed., 1972), stanza 5, line 4.

This view of the structure of textual interpretation is grounded in common sense; it shows how textual meaning is relational and how a person employing tacit powers grasps the relation of textual elements. Interpreting has the same from-to structure as other types of human action. Here I have discussed only an elementary example of interaction with the text though I believe more difficult cases, such as that involved in attending to the meaning of a literary text operating at more than a representational level, have essentially the same form. To view interpretation as an integration of particulars stresses the personal component of understanding, meaning and interpretative action in the sense that only an individual functioning person can do the integrating required to grasp meaning. It also affirms the integrity and power of the text as a symbolically representational strategy for giving-sense. Finally, this view also

XUM

stresses the social or communal context in which interpretative acts occur insofar as a text achieves its status as a valued potentially meaningful entity and a person achieves his skillful capacity for uncovering meaning in social life.

This consideration of the interpretative act as an integration raises two further problems which must be considered. The kinds of integrations involved in interpreting different kinds of texts, while similar in form, are not similar in the kinds of involvement of the integrating person which they require. The mood or state of mind of interpretative acts treating literary texts must be distinguished from the kind of interested but single-minded integrations by which we understand most texts. Secondly, the problem of plural meaning in a text must be considered. With some texts, particularly literary ones, different interpreters draw different conclusions about the meaning of a text. By focusing again on the nature of the interpreting person who shapes his discovered meanings, it is possible to understand the source of plural signification and the limiting parameters within which such a pluralism is set.

In the preceding chapter[5] I suggested that literary language could not be adequately defined in terms of formal features; it is at the deepest level the intention of the interpreter, usually prompted by the recognition of conventional formal features, which determines whether language functions for the interpreter as artistically employed language. When language is accepted as literary language, an interpreter responds to the text with a kind of sensitivity and awareness that texts taken to be non-literary uses of language do not receive. To assume a text is a literary text invokes a mood or state of mind for attending to the language which is different from the serious, everyday attitude taken with most language use. Our everyday state of mind brought to our interaction with a text is a pragmatic mentality; we read the text in order to discover its point of view, in order to become informed, or in order to do something else. There is a single-mindedness about the style of progression employed in moving through the text. We take little joy in the language but much satisfaction in the place arrived at in negotiating its intricacies. The mood with which an interpreter deals with language accepted as literary language is quite different than this. It is a mood that can be understood only in terms of what I have earlier characterized as the double meaning function of literary language.[6] To assume that a text is literary brings into play the quest for multiple significance in its language. An interpreter's state of mind is one thus that releases him to the possibilities of meaning. We treat literary language self-consciously as language. At a pre-semantic level, an interpreter listens to the song of words in a way he never hears the daily newspaper. At a semantic level he is attuned to the suggestiveness which words and ideas have. We are not content with an obvious and narrow range of significance; we actively seek the satisfaction of seeing obvious meanings in relation to other patterns and levels of significance of wider scope. In this sense, the mood in which we deal with literary language is one that cultivates ambiguity but at the same time succeeds in deeply involving the reader in his integrations. We are empowered to relate diverse elements of meaning which would be either ignored or judged confusing in a non-literary text. We are open to feeling elements of our own diffuse experience as somehow caught up in the meaning relationships which create.[7]

---

[5] Above, pages 249-51.

---

[6] Above, page 243ff.

The state of mind in which an interpreter engages a literary text is also one that heightens the interpreter's appreciation for the elements of order, symmetry and beauty in the expression. Literary writing is enjoyed and it is not only its wealth of meaning but also its aesthetic components (which its meaning patterns are a part of) which please. In this sense, the how of what is said (style) and the what merge in the literary text. The threads of meaning in the

---

[7] This discussion of an interpreter's mood or state of mind draws on Heidegger's discussion of state-of-mind as a phenomenon always characterizing Dasein. (_Being and Time_, p. 172ff.) _Befindlichkeit_ is one of the existential structures of the disclosedness of being in the world; through state-of-mind Dasein grasps its thrownness. Mood is always linked with primordial understanding which is the ground of interpretation. I am suggesting, without borrowing all of Heidegger's complex implications, that the response to language believed to be artistic has its special state-of-mind. The mood characterizing the intention to respond to art is that which allows an openness to the meaning and involvement possibilities of language.

XUM

literary text are felt by an interpreter to come together in a wholeness that is never quite articulable. The sounds, images, and symmetries are all components which the reader of literature is sensitive to; their meaning is a part of the whole focally appropriated by the interpreter.

The mood in which an interpreter engages literary texts is one in which the fullness of his skillful being is used to explore the possibilities of the text. Partially because we throw ourselves into the literary text actively seeking the richness of its signification, the literary text can be an inexhaustible source of meaning. A reader can return to a piece of literature and discover unanticipated significance; different readers of the same text can and often do discover meaning whose shape is not identical. This pluralistic character of textual meaning can be further explained in a reconsideration of the skillful being of interpreters. The skillful being of an interpreter is shaped in his life within a community. The skills which he learns and which are employed in interpretation are, for the most part, common skills. There is a coherence to social life because basic skills are shared. Yet, the skillful being of any interpreter taken as a whole is not simply replicated a thousand-fold in every other interpreter. Every person has his own series of encounters with others in the common context which give to him a certain individuality. Each person achieves an unduplicated identity in integrating his experiences and skills and shaping his own destiny in part through conscious choices.

The skillful being which an interpreter brings to a text is both uniquely his own and is marked by common features shared with his fellows. The meanings realized in integrating the particulars of a text must thus be described in terms of both their location within a common region and their particularity and nuance. Different readers understand the same text differently because they are different persons; that which they tacitly bring to bear in the act of interpreting is different enough to shape meanings which to some degree differ in aspect, while satisfying each respective interpreter.
In summary, the meaning of a text, particularly a literary text which deeply involves its readers, can never simply be assumed to be unequivocal and unchanging. Meaning is neither private nor fully public but is personal; it depends upon a person and the wealth of his skillful being brought to bear in the interpretative act. As personal, meaning already holds within it the potentiality for dialogue with others about the various possibilities of a text; though personal meanings found in a text differ we can appreciate alterantive understandings, since basic skills and presuppositions of interpreters functioning in the same community already are shared.

A consideration of the following literary text concretely illustrates some of the suggestions made about the effect of the interpreter's mood on interpretation and the plural nature of meaning in the artifact.

Her & It

I fell in love with a girl.
O and a gash.
I'll bet she now has seven lousy children
(I've three myself, one being off the record.)

I wish she'd read my book & write to me
from O wherever ah how far she is.
After all, I get letters from anybody.
From her, I'd tear to the' phone.

It's not now near at all the end of winter.
I have to fly off East to sing a poem.
Admirers, some, will surge up afterward,
I'll keep an eye out for her.

My tough songs well in Tokyo & Paris
fall under scrutiny. My publishers
very friendly in New York & London
forward me elephant cheques.

Time magazine yesterday slavered Saul's ass,
they pecked at mine last year. We're going strong!
Photographs all over!
She muttered something in my ear I've forgotten
as we danced.[8]

A reader of English would have no difficulty recognizing this piece as a literary use of language. Its appearance makes it abundantly clear that this is a poem to anyone who possesses a minimal knowledge of features conventionally employed in poetry. The process by which the meaning of such a text is appropriated is essentially the same as that described earlier for treating the last line of the poem. A reader must successively dwell in the particulars of the text in order to understand their joint significance focally. We start at the beginning and attend progressively to each word, sentence, line and stanza. The tacit knowledge which we bring to the reading experience is the key means by which the symbolic representations before us come alive.[9] As we move through the poem, previously focal elements become a part of this tacit awareness and function as aspects which lend precision to attempts to attend to the significance of later elements. Reading is a cumulative or generative process of attending from-to.

---

[8] John Berryman, "Her & It " in Love and Fame.

It is the mood in which an interpreter enters into this process of integration which is really important here. Because a reader knows this is a poem, his attempt to dwell in and understand its elements reflects a certain relaxation of common sense. There is a tolerance for the only partially logical modes of expression ("O and a gash") and the tendency in the flow of sense to jump from one topic to another. The reader works to understand the import of strange expressions, even though they might initially seem to be gibberish. The rapid change of topics is soon accepted as the means by which a contrast is established. The confidentiality of certain statements (line 4) is accepted as amusing. In general, the mood in which a reader engages this text recognized as an artistic use of language is one which prompts the reader not merely to march stridently through the text but to walk around the language and appreciate and explore its possibilities.

---

[9] I prefer not to discriminate between the importance of elements of the reader's tacit knowledge brought to the reading experience. It might seem logical to employ a law of parsimony in speaking of the reader's fund of tacit knowledge and thereby say that only certain elements of the reader's skillful being (e.g., his tacit awareness of how to deal with English in terms of its grammatical and syntactical structure) are employed in reading. The difficulty with this view is that it implies that what is important to the reading/interpreting experience can be designated fully; it culminates in the view that meaning is somehow "in the text" and is singular and unchanging. E.D. Hirsch, Jr., "Three Dimensions of Hermeneutics," pp. 245-61 uses such an argument against Heidegger's view that interpretation depends on the in-der-Welt nature of the interpreter. I believe that Hirsch's argument is fundamentally mistaken; as indicated, its application here would disguise the fact that all components of skillful being important to interpretation cannot be designated. Hence, I emphasize the wholeness of skillful being.

As the reader moves in this reflective way through the stanzas of the poem, he grasps a developing contrast between the speaker's memory of his earlier love for a certain woman and his present position as an established poet. The speaker is nostalgic about his former role as lover and claims that he would enjoy seeing the woman again and having her see him as the famous figure he now is. Meanings such as these are not literally denoted at the most elemental evocation of the words but they, nevertheless, are what is important here. The reader attends to the fuller significance of statements in terms of their relationship to the meaning of other statements. This is done, of course, to some degree in making coherent sense of any text, literary or otherwise, but dealing with a literary text does involve a particular relational sensitivity used in shaping meaning.

The last line of the final stanza brings to a culmination the building contrast between love and fame articulated in the course of the poem. As an interpreter makes sense of the line he recognizes that, despite the glory which the speaker enjoys, his fame no longer holds any intrigue or mystery for him; the woman, on the other hand, partially because her recent history is unknown and partially because the speaker cannot quite recall the details of a remembered event, remains a figure of intrigue and value. The last line thus encapsulates much of the meaning of the whole. The efficacy of this meaning is very dependent upon the preceding images of the poet's success and his uninhibited infatuation with the woman in younger years. The last line does not literally say "the woman remains interesting and fame has become tedious for me" though something of this sort is what a reader is able to infer from the line seen in its context. Such a paraphrase loses aspects of the feeling pre-articulately grasped in understanding the line, but some type of generalization inevitably follows from understanding the particularized import of the basic denotative level. Interpreting involves attending from one level of meaning to another; the mind tends to seek a generalization at a comprehensive level able to provide mental satisfaction.

Where this whole of mental satisfaction falls in determined neither altogether by the interpreter nor altogether by the text but in their interaction. We are not satisfied by simply repeating the words of the text as what we have understood in dealing with the text. Neither are we satisfied by speaking of or thinking of what has been understood in fanciful terms that stray from the text too far. The denotational meaning of the text (which at least feels, relative to other levels of meaning, stable) serves as an anchor providing a lower level of control for shaping a more encompassing and satisfying significance. It is possible, of course, for an interpreter to create an altogether whimsical interpretation of the text but such a creation remains just a creation. Self-projective tendencies are held in check for the most part by the reader's legitimate need to believe in the power of his discovered meaning. We achieve satisfaction in accepting those meanings which we can sincerely affirm as having a beauty and integrity about them which other sensitive readers will find satisfying. We accept meanings as real which anticipate the interminate fruitfulness of the text for others. The community of interpreting agents in which our own identity has taken shape is thus always in the background of interpretative acts in the undergirding form of our sense of plausibility. Interpreting depends upon the individual's responsible participation in shaping his meanings; those mentally satisfying meanings accepted by the person have within them a certain universal intentionality.

Acts of interpretation are guided by the individual interpreter's responsibility; the sense of fittingness of meaning includes a sense of the fittingness of meaning for others. Yet, even with this aspect of universal intention implied in interpretation, interpreters must recognize that a range of difference in meaning for a common text, particularly a literary text, is a possibility. The shape of the meaning of "Her & It" which I have suggested in terms of the tension between love and fame may not for other interpreters ring true. This may be the case even for interpreters whose background is much the same as my own. When an interpreter opens himself to the possibilities of the language of the text, the imagination responds to those possibilities which the interpreter as a living experiencing person is most at home with. This does not mean that an interpreter construes from the text what he will but it does mean that the shape of the meanings found to be most interesting, satisfying and encompassing will resonate with his own particular modes of being a person. Such resonance remains largely unspecifable and is very much tied up with the resonances evoked by the order, symmetry and harmony grasped in dealing with the text. An interpreter whose involvements, interests and self-understanding are grounded in a deep sensitivity to art and the process of artistic creativity might understand the contrast in "Her & It" in terms of a fundamental conflict between artistic creativity and participation in the normal flow of feeling in human life. The artist's commitment to his craft ironically produces for him the kind of artificial experience of his fellow man seen in the adulation of his audience; he remains in some sense cut off from the naive and direct emotional involvement in human affairs which was available before he fully gave his life to his work. Another reader for whom Freud's analysis of human experience is the final word could easily understand the basic contrast in the poem in terms of a conflict between the pleasure principle and the reality principle. Both of these possibilities are simply different ways that interpreters as different persons with divergent values, loyalties and self-understandings can make the poem into a signification with human depth. Such a pluralism of meaning does not indicate that interpretation is subjective but that it is personal. The fact that different interpreters can understand if not affirm readings other than their own shows that the personal is always set within the communal; a ground for dialogue and even conversion already exists.

In summary, this section has attempted to show how interpretation may be thought of in terms of persons in relation in social process. I portrayed the text as a speaking external entity coming from its own social location and an interpreter as a skillful being shaped in a community. The encounter between these two entities is one in which an interpreter dwells in the particulars of the text in order to attend focally to their joint significance. Interpretation has a from-to structure; it is a cumulative set of integrative acts. I extended this basic view of interpretation to consider the particular case of integrative acts attending to literary language. It is the mood in which we undertake the interpretation of artistically used language which frees the interpreter to consider the broad meaning possibilities of the language structure. Finally, I turned to the issue of the plurality of significations possible for a text and showed that the responsible quest for textual meaning is a quest for significance which satisfies and includes the perceiver's belief in its efficacy for others. This view affirms that texts are multivalent within a certain range because the skilled being of interpreters has its own particularity.

SECTION C:

THE DYNAMICS OF INTERPRETATIVE COMMUNITIES

The foregoing sections have shown how an interpreter, through his interaction with others, becomes the capable actor he is. I have described the interpretative act in terms of the tacit powers, skillful being, mood, particular involvements and interests, standards of satisfaction and the responsibility of an interpreter as he exists within a social fabric. The present brief discussion attempts to illumine the character of the interpreter and the nature of interpretative acts from a slightly different perspective; I here try to show that the community itself which is the locus and underpinning of individual interpretative acts is a dynamic coherent entity with a certain shape or identity.

XUM

Interpretation always happens within a community. A person is the creative agent who undertakes the project of understanding a text but persons achieve their stature and capabilities as interpreters through their interaction with their fellows. The act of interpreting, because it relies on tacitly employed skills and background, always reflects the presence of the interpreter in his social milieu. The norms, skills and assumptions or, more generally, the contours of the tacit horizons of individuals both signify and preserve, as they are actively employed, the unity of the social whole. The interaction among agents sharing a common world reinforces the tacitly-held knowledge by which the world becomes common. Since a community supports and shapes certain patterns and directions in which human vitalities flow, it is not only the underpinning of individual interpretative acts but can itself be considered as an interpretation of broader human endeavors. A community expresses valuations or commitments about the legitimacy, importance, and place of certain functions in which its participants are involved. In the broadest sense, it articulates a form of life. Because social functions inevitably give shape to life, communities might more accurately be referred to as communities of interpretation.

Both the authentic differences and similarities of interpretative communities need to be recognized. Communities usually are interdependent, sharing elements of their respective values, loyalties and outlook. The interrelation of communities might be described as

XUM

a nesting effect: the community of cloud chamber physicists is nested within the larger community of physicists and this in turn is a part of nearly nebulous aggregate called the scientific community. Certain aspects of the outlook of each of these groups with varying circumferences are shared, but the most specialized group clearly has the most highly articulated perspective and therefore the most coherence.

Differences in interpretative communities also have important bearing on the nature of interpretative acts. Communities from different historical eras or communities dealing with radically different types of problems often lack the kind of commonality and interdependence necessary to compare interpretative acts occurring within their respective parameters. Polanyi's analysis of Western anthopologists' attempts to understand the outlook of the Azande amply shows how the fabric of belief knitting together a community provides the person dwelling in it with a self-understanding and a view of experience which is virtually impervious to criticism in a medium external to the native idiom.[10] It is easy to understand in the areas of anthropology and myth studies how interpretative communities have a wholeness integral to them which makes it difficult if not impossible to translate the substance of interpretative acts into a wholly different frame of reference. To a lesser degree, this is true even among communities which share somewhat the same outlook.

---

[10] PK, p. 286ff. CF. discussion above, page 81ff.

Meanings are embedded in social context. The interpretative community is a system of action and its logic is developed internally.

Interpretative communities also have temporal dimensions to their constitution. Excluding the kind of interpretative communities centered around cyclical mythic frameworks, most communities have a linear sense of time. This means that they have historical antecedents which form the tradition in which present members stand. The force of this past upon the present is felt in the models and standards accepted by participants. The past thus informs or gives ground to present action, but it also partially forecasts the shape of future action. But the futural dimension of consciousness within a community is not altogether foreclosed by its past. The shape of consciousness or the identity and directionality of a community is always, to some degree, in the process of changing. The novelty of the individual participants, the interaction among novel individuals in social process, and changing situations promote the evolution of attitudes and patterns of action within a community. Thomas Kuhn has analyzed the evolving shape of the scientific community in terms of the rise and fall of great paradigms governing research.[11] Admittedly, this model applies directly to a community whose function is a specific kind of inquiry, but it is nevertheless suggestive for broader application. A community in the present has a paradigm or broad conception of fitting action which is informed by its past as it is readapted to the present situation. Individual acts are themselves grounded in the paradigm but they also serve to reshape the paradigm whether by evolutionary or revolutionary innovation. An interpreter can thus be seen as a responsible agent both reinforcing and reshaping the future shape of his community. He is an agent speaking from the community, through the community and to the community.

---

[11] Thomas Kuhn, The Structure of Scientific Revolutions (Chicago: University of Chicago Press; Phoenix Books, 1962).

The foregoing remarks attempt to illumine interpretative acts by laying forth some of the dynamics of the social world in which such acts occur. To give firmer outline to this somewhat abstract consideration, I shall examine as an example the nature of the literary critical community. Literary critics are professional interpreters and teachers; the community made up of critics is grounded in its participants' common concern for the activity of better understanding and teaching the literary heritage of a culture. This community is a scholarly community sharing many of the presuppositions of other academic communities and supported generally by the credence given to it by society at large. Its interpretative activites are promoted by a loosely integrated organizational structure that includes the administration of professorial chairs and university posts, professional societies, journals, and other publishing activities. The literary critical community has its own history or tradition which includes in the English-speaking sphere such notables as Coleridge, Arnold, and more recently, Eliot and Richards. Awareness of and belief in the value of this history helps to create and support the present commitment to the kinds of reflective enterprises engaged in by literary critics. Membership in the literary critical community is usually preceded by a long apprenticeship supervised by mature scholars in which a person becomes well acquainted with the scope of literary history and develops certain specialities. Much of the interpretative activity fostered by the community has until recently taken the form suggested by the New Critical approach to literature. This paradigm now appears to be breaking down. The general interest in theory of interpretation, and the evident influence of linguistics, psychology, computer studies and philosophical work upon criticism indicate that no clear new paradigm has yet been articulated with captures the imagination of a majority of practicing critics.

By understanding something of the dynamics of the community within which interpretative acts occur the interaction of person and text is itself clarified. Communities themselves have a shape or identity which must be seen both in its relation to other communities and in its integrity. Communities have a history and their present constitution can be seen as a reinterpretation of this tradition. Often the level of consensus within the community is sufficiently high to speak of the paradigm under which participants operate. But the community's consciousness is also always in the process of reshaping itself and the individual interpretative acts of agents may be seen as speaking to the future of the community.

In summary, this chapter has attempted to portray interpretative acts as forms of human action with both social and personal character. The social and the personal cannot really be seen as distinct because they together form a holistic way of speaking of the person. In the opening section, I portrayed how I believe persons become persons and capable interpreting agents in their life in society. I suggested that we come to share a common world and have a common being and yet remain unique individuals. Our interpretations are relative to our being and our being is in relation to other persons.

The second section expanded this view to discuss the skillful nature of a person's being and the interaction between this skillful being and the text accepted as an external, speaking entity. I analyzed the integration by which we shape textual meaning in terms of the different states of mind or moods involved in treating different kinds of texts. The literary text was portrayed in terms of its potentiality to evoke a full and broad range of signification. At the end of the section I discussed the plural character of meaning even within a community in terms of the individual involvements and interests of readers and the way integrations produce satisfaction. Finally, the present section sought to place the foregoing discussion of the dynamics of individual interpretative acts in the context of community with its own dynamics. I showed how the community itself has its own shape and may be seen as an interpretation of broader human endeavors.

I suggested that a community has its own structures and coherence, relationships with other communities, a history and a future which individual interpretative acts of the present are reshaping.

CHAPTER VIII

TRUTH IN INTERPRETATION

The preceding two chapters have attempted to sketch the broad outlines of an understanding of interpretation as a personal act. I have showed how an interpreter is an agent shaped in social process and how the encounter with a text is an integrative act occurring in a community. The present chapter rounds out this consideration of interpretation by examining the interpreter not only as person in relation with his fellows but also in relation to himself. I try here to give a firmer conception to the personal by looking at the passional and temporal aspects of the interpreter and showing what kind of conception of truth these aspects make appropriate to interpretation.

SECTION A:

THE PASSIONATE COMPONENT OF INTERPRETATION

The foregoing discussions of the structure of interpretation, summarized as an act of attending from-to, have not adequately portrayed the involvement of the person in the act of discovering meaning. Interpretative acts are always at least partially grounded in and supported by human passion even though overt emotion may not be apparent. Human vitalities which I shall call intellectual passions are apparent in

XUM

three ways in interpretative acts: in the desire to comprehend; in the belief that meaning is ascertainable; in the satisfaction taken in understanding. A person comes to a text seeking meaning and believing that meaning is accessible. A commitment expressing the desire for understanding is closely bound up with an interpreter's faith in his own powers and these two presuppositions launch interpretative acts. A text can in a certain sense even in mundane cases be regarded as that which intrigues and beckons the interpreter; it is an unknown which a skilled interpreter accepts as that which he believes he can understand. The act of working through the text and grasping its meaning is thus an anticipated and finally realized accomplishment. The achievement of understanding has within it feelings of satisfaction and even delight. This is clearly the case with the child just learning to read or with the interpreter who has made his way through a difficult work. Because the mature interpreter engages in so much textual interpretation in daily life, such satisfaction readily becomes transposed into more routinized, less overtly pleasurable forms of feeling.

Intellectual passions in the forms of desire to comprehend, belief that comprehension is possible, and satisfaction produced by comprehension are intrinsic components of interpretation that undergird the process of attending from-to. The desire to comprehend is the foundation of any interaction with textual elements. Earlier, I noted how, from a social perspective, texts can be said to select their readers;[1] those who have similar backgrounds have similar interests and this interest is expressed in the texts selected for interpretation. Interest, whether for purely pragmatic reasons or more expansive reasons, stands in the background of all interpretative acts. In the same way, the belief that comprehension is possible is a prerequisite for interpretation. An interpreter brings to the text a degree of self-confidence in his ability as a skillful being. This self-confidence allows his skills to function tacitly, flowing together in a unified act of understanding. When such self-confidence is lost, a reader's power to shape meaning and see the relation among various linguistic elements breaks down; paralysis sets in. An interpreter's self-confidence manifests itself in terms of the internally held, self-set standards of expectation applied to a text. Such standards govern how meaning should fit together into a whole. As a reader confidently reshapes his standards in light of the particular context of related elements before him, past evocations of words come to bear upon the given whole in a specific signification. An interpreter's self-confidence is also particularly important in supporting his attempt with a literary text to jump the gap from a denoted meaning to its harmonic possibilities. In large measure, the imagination required in a sensitive reader of literature is nothing more than a kind of daring self-confidence. An interpreter must feel his way into an analogical meaning and he can do this because he trusts his own ability to do so. Dwelling in what _is_ a denoted meaning in order to attend to what _is_ a potential harmonic significance is very much a skillful, felt response like learning to use a probe; an interpreter must become confidently able to use the denoted significance to feel around for the shapes which he intuits are available through skillful use of the primary level of signification. Finally, the feelings of satisfaction which accompany understanding serve the process of interpretation by confirming the interpreter's commitment to the meaning he discovers in a text. An interpreter takes satisfaction in fulfilling his standards. In making sense of that in which we anticipate meaning can be shaped we are persuaded of the efficacy of our discovery. In the domain of literature, this sense of satisfaction is transposed into delight. When an interpreter grasps a coherent, intricate vision of the meaningful whole in working with a difficult, ambiguous text, he is authentically pleased; discovered meaning has about it a compelling character.

---

[1] Above, page 251ff.

The intellectual passions which underlie, guide and ratify the process of interpretation serve, after the discovery of meaning, to support action related to the discovered meaning. An interpreter readily moves into whatever involvements a text precipitates after understanding its meaning. In most instances of interpreting a text the issue of the meaning of the text is never raised at all; we assume it is "there" for others to see and that what we have understood is what others would understand. In most cases, this is both a plausible and a necessary assumption which promotes the continued orderly conduct of life. Our action expresses our confidence in our own ability as interpreters and our assumption that others will ratify our own assessment of meaning. It is only with difficult texts -- particularly literary texts in which we find harmonic significance -- that the issue of meaning becomes an issue at all. In interpreting such texts, the reader has a certain self-conscious awareness of his interpretative activity. When an interpreter grasps a textual meaning which has been particularly difficult or that he intuits is a creative, exciting and beautiful response to the text, this meaning is its own reward; we have an authentic sense of having understood the depth of the matter. Though such meaning is particularly self-satisfying, it calls forth from the interpreter an attempt to elicit response from peers. Because interpreters are basically convivial persons interested in life, we seek a certain intentional dialogue about discovered meaning that holds within it self-conscious personal investment. We seek to enrich the world we share with peers by sharing the meanings which have special efficacy for us; we believe that which is compelling for us will have an element of fruitfulness for others. It is this motivation that grounds all interpretative disciplines such as literary criticism and biblical studies. In such an interpretative discipline, a whole community of persons shares a commitment to the value and importance of activities opening up the potential richness of texts in a particular domain. Especially in such specialized communities are issues of meaning debated. It is important to remember, however, that even among professional interpreters assertions about the shape of textual meaning are assertions made with universal intent: they reflect the passionate commitment of the interpreting person to the broad validity of his discovered meaning. Such assertions are not assertions about an objective, unchanging meaning wholly resident in the text. Interpretation always comes through the person as a responsible, passionate agent; there are no Archimedian points from which objective meaning is available. The possibility of alternative points of view is always very real. Because persons can and do engage in dialogue, even those meanings which presently seem fully compelling can become reshaped, renewed or replaced in time.

SECTION B:

THE TEMPORALITY OF INTERPRETATION AND THE PROBLEM OF HISTORY

The foregoing discussion of intellectual passions has shown that passions play a definite role in promoting the process of interpretation and in promoting the dialogue about meaning in which acts of interpretation often culminate. In introducing the subject of dialogue a new issue, the temporality of interpretation, has already obliquely begun to emerge. In this section, I shall consider this issue by addressing two questions: what can be said about the interpretation of texts from the past in light of the presentness of interpretative acts?; what is the relationship between the temporal character of personhood and interpretative acts?

Interpretation always occurs in the present and is the act of a person. It might seem trivial to make this observation, but it does raise for some[2] the issue of the accessibility of texts that come to us from the past. If the meaning of such texts is available only through the person, constituted in a definite social horizon, and understanding in the present by virtue of a dynamic appropriation of this horizon, is the "original and intended" meaning of the past text available at all? Does the kind of person-centered view of interpretation put forth here not imply that the past is inaccessible? Is the hermeneutic circle more than a vicious circle affirming a parochialism of the present? These are difficult questions because they have already presupposed a view of history and a view of meaning not shared by the perspective developed here. I shall try to address them by describing the way I believe that the meaning of a text from the past is appropriated.

An interpreter understands a text from the past by dwelling in its particulars and integrating them in order to focus on their conjoint meaning. The structure of interpretative activity seeking

---

[2] E.D. Hirsch, "Three Dimensions of Hermeneutics," for example, raises this issue.

XUM

understanding is the same for dealing with a Shakespearian play as for treating a poem like the previously discussed selection from the work of the modern poet John Berryman. It is true that an interpreter shares more of the daily world which Berryman operated out of than he shares with Elizabethan England. A reader has little difficulty in dwelling in the idiom of the text because it is an idiom familiar to him. This is not the case with Shakespeare. An ability to dwell in the text demands more than a familiarity with the everyday world in which the interpreter lives. How does an interpreter achieve the expanded sensitivity necessary to work confidently and competently with material now over three hundred years old? How can an interpreter zero in on the text of Hamlet as he believes an Elizabethan audience might have? Must a reader not somehow suppress or shed his present identity as a twentieth century person in order to experience the text as did those of an earlier age? According to the view of interpretation which has emerged in the past chapters, this is impossible. It is thus not by suppressing his identity constituted by his involvements in his own world but by expanding this identity that any greater sensitivity to a past text is achieved. A reader comes to be at home with the text of Hamlet by using the means available within his community of interpretation to expand his own horizon out of which he attends to the text. He studies critical material about the tradition of the revenge play, the political climate of Elizabethan England, etc. All such efforts are a trusting submission to the tradition of scholarship recognized as competent in the field. This is the case even if the prospective interpreter forms his own ideas about the milieu of the text by reading and rejecting prevailing opinion. By expanding the fund of tacit knowledge through which he can attend to the text, the interpreter reaches a point at which he believes himself competent to understand the text as a contemporary might have. It is in this frame of mind that assertions about "original" or "intended" meaning are made.

While it is necessary to recognize that an assessment of "original" meaning is often important, legitimate interpretative acts will not and should not be limited to this narrow domain. Particularly with an evocative literary text, interpreters will find significance which spills over beyond the borders of what is conventionally regarded as the domain of original intention. Texts accrue meaning as they pass through time. Hamlet often is interpreted in terms of the psychological categories of Freud. This is a legitimate and even a natural perspective insofar as the self-understanding and interests of the interpreting person are grounded in psychological studies which become the tacit horizon through which he can attend to the text. There are no grounds outside of personally accepted criteria shaped in interaction with communal norms for judging what constitutes the "original" meaning and accrued significance of a text. This multivalent view of the text does not imply that anything can legitimately be construed as the meaning of a text, but that judgments

XUM

of the legitimacy of meaning are made individually and communally and that some judgments will always stand against the norm. If an interpretative community cannot tolerate a certain level of diversity, it loses part of its richness and the creative input which is necessary for growth and change. As long as the overarching values of the community are well articulated and a sense of responsibility for interpretative activities is instilled in the individual debates about meaning, "intended" or otherwise, are a sign of the health and vigor of the community.

In summary, the present character of interpretative acts does not imply that the meaning of texts coming from the past is inaccessible; "original" or "intended" meaning is accessible through the present act of an interpreter who responsibly expands his own interpretative horizon through interaction with the traditions of his community and who responsibly commits himself to the meanings he discovers. In affirming that we believe a given meaning is most appropriate for a text from another era, we affirm our confidence in our own integrity and that of the community in which we stand and invite dialogue with others. Responsible interpretations of a text have a compelling plausibility for their creators; they are invested with selfhood. The criteria for judgments about "original" meaning are personally held criteria arrived at in interaction with communal norms; they vary somewhat from person to person. What one person judges as an "intended" signification may be judged by another an

XUM

unintended or accrued meaning. What is important about meanings, whether the individual judges them as "intended" or otherwise, is the efficacy they have for the person as an achievement fulfilling self-set standards of excellence for treating the text; authentic meanings have interest for their creator/discoverer and prompt an attempt on the part of their perceiver to share their beauty with others. The hermeneutic circle is not a vicious circle as long as persons are responsible interpreters.[2]

The preceding discussion has emphasized that the possibilities of interpretation must be understood in terms of the present-centered and personal character of interpretative acts. In raising the issue of the temporal locus of interpretative acts, it becomes very important also to consider the temporal character of the interpreting agent; because the self is not static, the present character of interpretative acts is dynamic. Interpreters are temporal creatures; this means that personhood is in process. We are never completely formed, but are always in the process of reforming ourselves. The action in which we engage is always re-shaping the pattern of commitments which we are.

---

[2] The view of interpretation developed here with respect to the historical text attempts to articulate an understanding of meaning that views meaning neither as an unchanging kernel resident in the language of the text nor as an exercise of capricious freedom on the part of the interpreter. The former static view which has been more common in recent interpretative theory, I believe ultimately trivializes the interpreting agent, failing to appreciate the active shaping of meaning and the diversity of personhood. The latter view trivializes meaning. The view advanced here claims that meaning is personal and commitmentmental while at the same time being communal.

The skills which we have mastered beget new skills. The dynamic field of tacit knowledge which is in our command is constantly in the process of reorganizing itself. The fact that personhood is an emergent does not imply that the self is a groundless creature but that the ground in which human agency is rooted is a malleable, self-creative ground. To be sure, at the level of consciousness and even at the level of tacit structure, our self-transformation is incremental. We experience ourselves as largely the same from day-to-day but from year-to-year this sameness is expressed as a continuity and not an identity. We understand the passage we have taken but that passage has worked its magic upon us.

Since interpreters are always figures in the process of transition, their relationships with a linguistic text achieve a certain dynamism. As the tacit field of knowledge undergirding selfhood is transposed, the possibilities of understanding the text are themselves subtly reshaped. When we return to even an ordinary text after a long period, we experience its meaning from a new perspective. An interpreter has the sense that he sees as he has not seen before. Perhaps this is attributed to an increase in wisdom, additional maturity or some similar change. What such accounts really mean is that the person attends to the text from a tacit horizon whose contours are no longer exactly as they were when the text was first considered.

XUM

It is with the literary text that this emergent character of personhood becomes really important. An interpreter opens himself to the possibilities of meaning in a text treated as an artistic use of language. An artistic text offers to its interpreters possibilities of harmonic significance and as we appropriate such meaning the text takes on real richness. When we return to a literary text after a period of time we approach the act of interpretation full of expectations based on previous experience. But because we are subtly different persons, our dwelling in the text has a new form; the text seems to break into our expectation. Our awareness of its wealth is reshaped. We awake to connections and subtleties previously unseen. Part of the reason that a literary text is an inexhaustible source of interest is that the basic tacit ground out of which an interpreter appropriates the text is alive. The harmonic potentialities of literature grow as we grow. At the end of the fifth chapter I suggested that the bond between text and person as the creator/discoverer of textual meaning could be summarized by describing a text as a comprehensive entity bearing on reality. In light of this discussion of the temporal character of interpreters, this can now be amended: a text is a comprehensive entity bearing indeterminantly on reality.

XUM

SECTION C:
TRUTH AS BEING-TRUE

Preceding discussions in this chapter have sought to illumine certain elements of a person's relation to himself which have a bearing on interpretative activities. I suggested that all of human activity is infused with passion and that intellectual passions must be recognized as elements that directly support and guide interpretative activities. I showed how interpretation as an activity occurring in a definite social and temporal locus can yet remain sensitive to the historicality of meanings by taking seriously the commitment and responsibility of the interpreter. I argued that the interpreter's status as a temporal creature means his own self-understanding and identity have an open texture. Persons are always in the process of re-shaping the tacit horizons out of which they act; our encounters with texts are therefore revitalized by our experiences in living. All of these considerations have tangentially been concerned with the issue of truth in interpretation and have begun to suggest the outline of a view of truth growing directly out of the image of personhood developed in these chapters. This section attempts to give a firmer conception to the sense in which we can speak of the truth of interpretation.

The meaning of a text is the meaning it has for a person. This does not imply that meanings are not broadly shared, but that

XUM

there are no disembodied meanings; all meaning is incarnate in the interpreter who understands it. The dualistic logic which presupposes the separate existence of facts and interpretations of facts is a false logic. It is impossible to speak of textual meaning as if it were something independently accessible apart from that which interpreters discover in struggling with a text.

Because persons are the shapers and holders of all meaning, they remain responsible for the meanings they discover and create. The integrity of the interpreter as a person stands behind his assertions about textual meaning. In serious acts of interpretation, a person struggles for understanding. Such energetic participation reflects the person's acceptance of the valuing placed upon understanding and appreciating meaning by the community in which he dwells. When this struggle culminates in actual statements or judgments about the nature of a text's significance, such statements or judgments are self-warranting. There is no external state of affairs which can serve as a model to which interpreted meaning must correspond. An interpreter recognizes and accepts that which he believes to be true on the basis of its ability to fulfill his own self-set standards; meanings to which we responsibly commit ourselves as valid are compelling and elicit our commitment because they satisfy our sense of mental fittingness. But the standards which we accept for judging mental fittingness are not created in a vacuum. It is through the interpreter's convivial nature and his involvement with other people,

XUM

particularly those who share intimately in the endeavors in which he invests himself, that he comes to have the standards which function tacitly in evaluating his interpretative efforts.

The feelings of mental rightness attached to a discovered meaning include, to some degree, the belief in the efficacy of meaning for others. We do not accept interpretations as exclusively our own, but believe that others who seriously engage the text can appreciate the shape of what we have discovered. Meanings and assertions about meaning accepted as true are fraught with universal intent. Our commitment to broad validity reflects the quality of self-investment in our interpretations. Meaning backed by universal intent is meaning inviting dialogue with peers.

In accepting feelings of mental rightness as the standards of truth in interpretation, the whole question of validity in interpretation is transposed into a question of the personal responsibility of interpreters. The truth of interpretation is primarily concerned with the being-true of interpreters. It involves our acceptance of the responsibility for shaping our meanings and this, in turn, involves the acceptance of values and traditions in which one can believe which will function as that by which and through which we interpret.

In summary, the veridical component of interpretative acts is tied up with the serious, passionate intensity of a person as he stands in a community and engages in interpretative acts, with the creation of standards and the feelings of mental rightness engendered

XUM

by fulfilling these standards, and with an interpreter's passionate commitment to the belief that his understandings will be revelatory for all interpreters. To speak of the truth of interpretation at this level does not deny that interpretations will differ among persons and communities. Persons will always judge some interpretations to be more fruitful than others. The existence within a community of divergent understandings of a text should not be seen as an unfortunate or dangerous circumstance but as a mark of the success of the community in conveying to its participants the challenges and pleasures of personal interpretative acts.

SECTION D:

TOWARDS A PERSON-CENTERED HERMENEUTIC: GENERAL SUMMARY

The view of textual interpretation presented in this division has attempted to present interpretative acts as personal. This generally has been an endeavor seeking to shift discussion of interpretation from a platform of discourse operating in terms of a subjective-objective polarity to a platform focusing on the interpreter as a social agent. Interpretation is a triadic rather than a dyadic affair; it involves not just text and interpreter but both of these as they are constituted by and bound together in social life. A person is created in his involvement with others; he is both similar to his fellows and unique. A discussion of interpretation must be grounded in an interactionist conception of the interpreter rather than in the naive notion of the text as a repository of meaning which may or may not be appropriated.

Chapter VI began with the proposition that an interpreter always already had a primordial familiarity with the text. A text is an entity in the social world and an interpreter is being-in-the-social-world. This ontological view can be unpacked by showing how an interpreter as a person is an agent. The "worldish" nature of persons is given dynamic form in Polanyi's conception of the tacit structure of human knowing. The movement of a person in the world is achieved as a coordinated effort of attending from internalized or enselved particulars to something else. A person is a self-regulating organism with certain acritical powers of self-coordination and self-extension through which we have our being-in-the-world. We respond to the environment by enselving it -- by assimilating it so that it functions pre-focally like a part of our bodies -- and we become sophisticated environmental selves. The form of human action is that of dwelling in particularity and integrating it such that unified conjoint achievements (understanding is a type of such conjoint performance) occur. I discussed indwelling and integration for joint performance in terms of a person's skills, his habits and his relation to tradition. Human action as from-to movement can also be further characterized as directed and intelligent. The from-to movement of a person is a directed movement in the sense that it is a constant expression of valuing and purposing.

XUM

Such action is intelligent because it is supported by either tacit or explicit understanding and led by a desire for further understanding.

With this general perspective on the nature of human action, Chapter VI turned to the problems of textual interpretation as a particular domain of human action. The primordial familiarity of the interpreter with the text as a part of his "worldish" being means only that texts can call for specific illumination. Textual interpretation as a form of human action is a sense-reading act. A text is a subsumption of experience under conventional linguistic form; it is a sense-giving act. I used the term "linguistic strategy" to imply both the sense in which a text is an embodiment or sense-giving act and as a plan for sense-reading. As texts enter the public domain, they must be discussed in terms of their sense-reading character; our access to their sense-giving intention is only through our own sense-reading experience. Both sense-giving and sense-reading have the from-to form of all human action. They are acts with a triadic structure: they involve a person integrating or bringing to bear subsidiary particulars on a focus. Interpreting occurs when a skillful person attends from subsidiarily known or internalized particulars to their conjoint focal meaning or significance. Meaning as a term applied to a text can be usefully broken up into what has meaning (i.e., particulars indwelt or subsidiarily known) and what is meaning (the focus of an integration). Because interpreting a text is a cumulative, multilevel act, what is

XUM

meaning is constantly becoming what has or bears on a more holistic significance. This generative aspect of the appropriating of meaning expands until a satisfying terminus is reached. Textual interpretation thus involves sets of cumulatively constituted wholes of meaning of increasing circumference.

Because language use is orderly and evocative, texts may have harmonic as well as denotative (*i.e.*, representational or meaning by pointing) meaning. Harmonic meaning is the meaning an object of attention has in terms of an already accredited context or pattern. The word "cross" has both denotative (elements set at a perpendicular angle) and harmonic meaning (in terms of the significance of "cross" in the context of Christian mythology). The basic harmonic meaning of language is always present in language use, but it is not noticed except in language a person responds to as an artistic use of language. All written or oral sentences have a certain immediately experienced meaning in terms of the relation of the sound of words as they follow each other in forming a pattern; this is an unnoticed harmonic meaning, but with a poetic text it becomes a readily appreciated feature to which a reader/hearer is attuned. Harmonic meaning also exists at a higher semantic level than that of such immediately experienced harmonic meaning of sound. In the text responded to as an artistic use of language, what *is* denoted meaning often becomes what *has* harmonic meaning.

XUM

Obviously, the distinction I have drawn between what is and has meaning and between harmonic and denoted meaning serves to affirm my belief in the appropriateness of an analogical interpretation of the artistic linguistic strategy. The discussion of kinds of meaning and the dynamics of meaning has in some ways preempted a discussion of the preliminary problem of defining artistic language. In the final analysis, artistic language cannot be defined in terms of formal features. It is the intention of the interpreter, usually evoked by his acquaintance with conventions which can be located as formal features, which keys a person to open himself to the harmonic potentialities of a linguistic strategy. Because both writers and interpreters are social creatures tradition and the conventions which compose it make claims upon the interpreter and shape his response to a text. It is because of this sociality of writing and interpreting that the interpreter's opening himself to the harmonic potentialities of a text is not simply an invitation to subjectivism. The contexts in which a particular meaning of a text can come to have its resonance (as, for example, the context of Christian mythology in which "cross" has harmonic meaning) are contexts shared by interpreters. It is the similarity of readers as social creatures that is the primary fact of interpretation.

In summary, the opening discussion of textual interpretation portrayed the structure of interpretation in terms of the from-to structure of all action. A skillful person integrates subsidiarily-held particulars in order to understand their focal meaning. Such integrating is a generative process: what is subsidiarily held or what _has_ meaning is constantly shifted in order to achieve a satisfactory, encompassing focal meaning (_i.e._, element which _is_ meaning). The nature of meaning can be further differentiated into what is denotatively meaningful (_i.e._, meaningful by being pointed out) and that which is harmonically meaningful (_i.e._, meaningful by becoming a part of an already accredited context). This view of the structure of interpretation and the nature of meaning are brought together in the conception of the text as a comprehensive entity bearing on reality. This view emphasizes the relational character of meaning as it is appropriated in a person's act of integrating various elements. It stresses that interpreters themselves are in relation and the meaning of a text, even its harmonic meaning, is shaped by the form of life they share.

Chapter VII turned from this somewhat abstract and structural discussion of interpretative action and meaning to a discussion of the nature of an interpreter as a living, historical creature. A developmental sketch of the person showed how we evolve into the sophisticated textual interpreters we are. I emphasized how we are born into a world already full of meaning and how we gradually appropriate this through our from-to pattern of acting. The child's world is a continuously expanding or differentiating world. Rudimentary physical coordination eventually culminates in achievements such as vision, and these skillful modes of human being then become stepping stones used to appropriate more social skills such as those associated with language. In his interaction with others, the child is gradually initiated into the common world of his action system. He is forever mastering new integrations which more deeply establish his being in the common world. As we mature, the basic pattern of using who we are and have been to become new persons continues but at a much slower pace. We have become self-confident and self-conscious participants in a highly differentiated world. This world cannot be separated from our personhood, for we are this world existingly. This is a common world and our living through it constantly embodies our trust in those who also live through it.

To say we are engaged with our fellows in living in a common world -- in bringing an already similarly constituted tacit horizon to experiencing -- does not exclude the fact that as persons we are individuals. Our involvements in the sense of our valuing and loyalties are already much the same at a primordial level, but within our closeness to and commonality with others there prevails a certain uniqueness of the person built upon our foundation of common skills. The active encounters that shape us are never exactly the same. As active, integrating experiencing centers, we have the opportunity to decide to some degree how the other which we encounter is to become

XUM

a part of us. Personhood is always an inseparable mixture of the common and the unique. A person can thus understand the fineness of feeling that belongs to another and at the same time recognize his own definiteness as a being-in-the-common-world as authentically his own. We are persons in common and in rich particularity.

The definiteness of persons as common and particular means that our interpretations of the world are enriched by the color of our personal being. Our basic tools are common tools; the world such tools opens is a common world. But the intricate pattern of feeling and awareness that constitutes a person, though it shares much with those with whom he interacts, is always his own. It is this pattern, functioning as a tacit field, which a person brings to bear upon any text he encounters. With a text in which we fully invest ourselves such as a literary text, the particular coloring of our own perspectival being is necessarily reflected in our understanding, though such understanding falls within boundaries which social living preordains. We exist in a state where we can understand one another (though with difficulty, at times) and at the same time understand that we do not always understand the same.

I called this state the relational relativity of interpretation: interpretation is relative to persons and persons are relative to one another -- that is, in relation forming a community. Dialogue, founded on the primordial already constituted relationship of persons within a system of action, is already a possibility for most interpretative situations which embrace divergent perspectival readings. Such dialogue is less possible when the social ties binding different interpreters together are more tenuous.

In summary, the image of the interpreter presented in the opening section of Chapter VII focuses on how his capabilities as an interpreter are formed in social life; an interpreter both lives in the common world of his fellows, sharing the tools which open and maintain this world, and stands out distinctly as an individual among his companions. Acts of textual interpretation can therefore reflect the particularity of persons even while falling within a common range of possibility; dialogue is a means, whose foundation is already laid, for sharing the particularity of interpreted meaning.

The second section of Chapter VII sought to take this general social understanding of the interpreter and interpretation and apply it more specifically to the case of textual interpretation. Textual interpretation is a special case of the interpretation that goes on all the time in a person's life. A text is a symbolic representation, a sense-giving act which has entered the public domain and lives by being interpreted and reinterpreted. It is treated as an exterior entity with its own integrity and powers of speech; it comes from its own location and it sometimes gives-sense in strange and difficult ways. As a written document it is true that a text has spoken but because a text lives by being interpreted it can be said to continue speaking. Texts achieve in their different interpreters and times of interpretation a certain multivalence, but because most texts are treated with a certain disinterested curiosity, this multivalent potential is rightly ignored. The powers of a text can be summarized by saying that a text is neither fully indeterminant nor fully determinant; it is an external, self-presenting entity that continues to reveal itself. It is a potentially meaningful entity for those who engage it.

The interpreter, like the text, can be described in terms of the potentialities brought to interpretative acts. I suggested that the most holistic and dynamic way to grasp the identity of an interpreter is in terms of his skillful being. Skill is a process or way of being. Our conception of skill in terms of skills as attributes added to personhood is an impoverished way of understanding an interpreter as an agent. An interpreter is dynamically understood only when seen in terms of the broad scope, interdependence and unified way of functioning of all the skillful elements, performative or theoretical, which constitute personhood. We achieve our stature as skillful beings in the slow process of coming to maturity in a community; to be a skillful being is to be a being-in-the-common-world. What is normally thought of as an interpreter's literate skills are always integrated with all the other capabilities which make him a coherent, active creature.

The interaction of interpreter and text involves bringing the skillful being of the interpreter to bear upon textual elements. Interpretation is an integrative act of shaping meaning. It involves dwelling in textual particulars and attending to their joint significance. I showed with a simple declarative sentence how the process of understanding involves distinct stages with different objects of focal attention which all must be put together. Integration is a cumulative process in which what was focal becomes what is used tacitly to attend to a larger or more encompassing whole of meaning. This view of the structure of textual interpretation is grounded in common sense; it shows how textual meaning is relational and how a person employing tacit powers appropriates a fitting relation of textual elements. It focuses on the person as an integrating agent shaped in a community of agents; it affirms the power of the text as an accepted strategy for giving sense.

Following this general treatment of the structure of textual interpretation, discussion in the second section turned directly to the nature of interpreting literary texts by considering two issues: the mood or state of mind in which the interpretation of literature occurs; the plural possibilities of meaning in the literary text. An interpreter is to some degree released from the pragmatic mentality in which he normally deals with texts when he accepts a use of language as a literary use. The mood in which an interpreter deals with literature is one which allows him to take pleasure in language and seek its multiple possibilities for signification. We are attuned to the suggestiveness which words and ideas have and are not content with an obvious and narrow range of meaning. An interpreter actively seeks the satisfaction of seeing obvious meanings in relation to other patterns and levels of significance of wider scope. The mood in which we interpret literary language is one that seeks ambiguous harmonic meaning; we become deeply involved in our integrations and are empowered to relate diverse elements of meaning which would be either ignored or judged confusing in a non-literary text. The state of mind in which we deal with the literary text is also one that heightens the interpreter's appreciation for the elements of order, symmetry, and beauty in a text. What is said (meaning) and how it is said (style) merge in the literary text. Literary writing is enjoyed and it is not only its wealth of meaning but the aesthetic components with which meaning is inextricably tied that pleases.

Since the literary text is one in which an interpreter dwells deeply with his full skillful being as he seeks satisfying, encompassing levels of meaning, it is not surprising that different readers discover in the same text meanings whose contours are not identical. I suggested that such a pluralism was understandable in terms of the uniqueness of the interpreting agent as he stands in a community of agents with common skills and gives himself fully to his interpretative act. Insofar as agents have somewhat different interests and self-understandings, a certain range of difference in meanings is probable with a literary text. But, because interpretation happens in a social context, our personal meanings are not private. As personal, meaning already holds within it the potentiality for dialogue with others about the various possibilities of a text. The common skills and common being of interpreters in relation with each other suggest that the range of meaning accepted as plausible for a text will not be infinitely broad; differences in meaning can be closely examined in dialogue, since interpreters already participate in a common universe of discourse.

Finally, at the conclusion of the second section of Chapter VII, I attempted to bring together the suggestions made above about the nature of texts and skilled interpreters, the mood of literary interpretation and the plural possibilities of meaning in an examination of John Berryman's poem, "Her & It." I showed how an interpreter as a skilled literary agent invoking a literary state of mind might integrate the various textual elements and come to understand the expansive significance of the poem. I pointed out that meaning discovered in reading is meaning accepted as interesting, satisfying and encompassing; it resonates with the interpreter's particular modes of being a person. Such meaning includes a certain universal

XUM

intentionality; what I as an interpreter found in the text is something which I believe is fitting or appropriate meaning available to other readers of the text. Despite my own commitment to the discovered meaning, I showed how I as an interpreter could imagine that another reader might construe meaning differently. The basic contrast in "Her & It" takes on depth for a reader in terms of his own particular interests and self-understanding. Even though the shapes of meanings discovered in a common text somewhat diverge, interpreters as persons already to some degree sharing skills and background, can appreciate and examine each other's understandings of a text.

The brief concluding section in Chapter VII turned from a discussion of the dynamics of individual interpretative acts to a discussion of the dynamics of the community itself in which such acts occur. I suggested that it is important to understand interpretation not only at the individual level but also in terms of the coherence and identity of the social matrix in which texts come to be considered. Communities articulate a form of life; in the broadest sense they are an interpretation or a valuation of human experience. Both the relationship and interdependence among communities and the authentic differences among communities need to be understood in order to understand the different kinds of individual interpretative acts which they foster. Each community has a history and its present constitution can be seen as a reinterpretation of its traditions.

Paradigms or controlling metaphors often serve within a given period of a community's life to control or to guide the activities of the community's participants. A community's consciousness or outlook is also always in the process of reshaping itself and the individual interpretative acts of agents may be seen as speaking to the future of the community.

Chapter VIII turned from the foregoing discussions of interpreter and interpretation in terms of relationships among different persons in a community to a discussion of an interpreter's relationship to himself. In treating the passionate, temporal and veridical components of interpretation, I attempted to give a firmer conception of the personal character of interpretation.

All human activity is infused with passion; interpretation is no exception. Passion plays a part in three important aspects of the interpretative process: the desire to comprehend, the self-reliant engagement of the text, and the satisfaction taken in understanding. Desire for understanding is the bedrock of interpretative acts; such desire combined with the confident faith in the interpreter's ability as a skillful agent launches interpretative acts. Without self-confidence and desire for understanding, an attempt to deal with a text collapses into a jumble of confusion and paralysis. Interpreters as skillful persons have self-set standards which govern their attempts to shape the meaning of a text; in fulfilling these standards an interpreter achieves satisfaction. In this sense, understanding is always ratified with self-satisfaction though in routine acts of interpretation we hardly notice the pleasure taken in the discovery of meaning. With a difficult text such as a work of literature, we experience an authentic delight in grasping the meaning of that with which we have struggled.

The intellectual passions that support and guide the process of interpretation serve also after the discovery of meaning to encourage dialogue among interpreters. In most of our everyday interpreting of texts, the issue of the meaning of such texts is never raised at all; our on-going actions reflect our understanding and our interaction with others suggests that our understandings have at least the commonality to allow the orderly conduct of social life. But with difficult texts in which much of our selfhood is invested in the act of interpretation the issue of meaning becomes a public consideration. We seek to enrich the world we share with peers by sharing the meanings we have discovered. It is this motivation that grounds all interpretative disciplines such as literary criticism and biblical studies. Even with professional interpreters, statements about textual meaning remain statements of universal intent; there are no Archimedian points from which meaning is available. The person always stands with and behind the meanings he offers to his social companions.

PLEASE NOTE:

Page 332 is lacking in number only. No text is missing. Filmed as received.

UNIVERSITY MICROFILMS.

XUM

The focus on the person as the ground of meaning presupposes a certain temporal conception of meaning. I discussed the temporality of interpretation in terms of two issues: the problem of "original" meaning in the text from the past; the temporal character of personhood and its bearing on textual meaning. All interpretation occurs in the present and is grounded in the tacit powers which a contemporary person can bring to bear upon a text. For some, such a conception of interpretation as always within the hermeneutical circle excludes the possibility of judgments about "original" or "intended" meaning in texts from another era. I argued that this is not the case: "original" or "intended" meaning is one of several kinds of legitimate meaning which a text may have; judgments or statements about "original" meaning, like judgments about any other type of meaning, rest upon the commitment of the interpreting agent. We understand the text from the past by dwelling in its particulars in order to attend to their conjoint meaning. The habits of past expression necessarily appear to us as enigmatic when compared to our everyday idiom. We achieve an ability to dwell comfortably in the world of the past by trustfully submitting to the tradition of scholarship which opens up the richness of another era. We are able to zero in on a past text as we believe a contemporary might have by expanding the tacit horizon from which we attend to textual elements. By working to expand his own horizon, an interpreter thus reaches a point from which he believes himself competent to understand what he judges to have been the "original intention" of the past text. In summary, the view of interpretation presented here argues that history has meaning within a definite present community; the responsible commitment of a person involved in that community must be taken seriously as the vehicle for articulating the meaning which definite historical events had for contemporaries.

In claiming that the person is the ground of all interpretation, it is important not to conceive personhood as a static phenomenon. The person who engages the linguistic strategy is a dynamic entity. We are in a sense always re-making ourselves. Our interactions in daily life and even our interpreting of texts are always subtly reshaping the self we have been. The tacit horizon which we bring to acts of textual interpretation is thus in a continual process of incremental renewal. For this reason, even the text whose denotative meaning has been quickly appropriated and forgotten holds within it a certain polyvalent potentiality. We can experience the meaning of such a text from a new perspective when we return to it after an interrum. In this regard, it is the literary text which becomes authentically revelatory for the temporal interpreter. In struggling with such a text we open ourselves to the possibilities of meaning; we are in a sense carried away by the harmonic significance we discover in such rich language events. When we return to such a

XUM

literary text we dwell in its particulars with certain expectations but the text itself breaks into our expectations and reshapes our awareness of its wealth; we wake to connections and subtleties previously unseen. The harmonic potentialities of a text grow as the tacit awareness which we can bring to such a text grows. As an inexhaustible source of interest and delight for the temporal interpreter, the literary text is a comprehensive entity bearing indeterminantly on reality.

In finale, I turned to the veridical components of interpretation. Everything said in the preceding discussions underscores the fact that meaning is meaning for a person as a skilled creature in a definite social location. Since there are no disembodied meanings for texts, it is impossible to speak of the truth of an interpretation in terms of the correspondence between meaning realized and meaning resident in the text. The veridical components of interpretation must be conceived, instead, in terms of the responsibility and commitment of the interpreter. The struggle of a serious interpreter for understanding reflects his involvement with a past tradition of interpreting and his attempt to equip himself for his work. When such struggle culminates in an act of understanding, an interpreter accepts the feeling of mental fittingness engendered by fulfilling his own responsibly set standards. The meanings which fulfill such standards are meanings we hold with universal intent;

they are infused with our self-investment and we are committed to their fruitfulness for other interpreters of the same material. This does not imply that others will necessarily draw exactly the same conclusions from texts with which they too responsibly struggle. A plurality of interpretations for any challenging, rich text will always emerge with the diversity of persons engaging it but this plurality will fall within a circle that allows dialogue.

In summary, the truth of interpretation is tied up with the serious, passionate intensity of persons as they stand in a community and engage in interpretative acts, with the creation of self-set standards and the feelings of mental rightness in fulfilling these standards, and with the passionate commitment of each interpreter to the belief that his understandings will be revelatory for his social companions. Truth is in being true as a responsible person struggling to understand that chosen as valuable.

DIVISION III

POLANYI'S AESTHETIC THOUGHT

CHAPTER IX

THE STRUCTURE OF ARTIFICIAL COHERENCES

SECTION A:

GENERAL INTRODUCTION

Late in his life, Michael Polanyi's writing has turned to a new area. His most recent and probably last book, Meaning, develops an epistemological analysis of art, religion and myth. But this new subject matter is really not a new interest for Polanyi. Throughout his life and his earlier publications, Polanyi has often treated each of these topics though never as a subject in itself. In Personal Knowledge, for example, he has employed the research of Evans-Pritchard on the Azande to show the epistemological structure of belief systems. He analyzed Christian worship in the context of his discussion of the convivial ground of all knowledge. He frequently alludes to poetry, painting, music and drama for illustrative purposes.[1]

Meaning, in taking art, religion and myth as its subject matter, draws upon many of the views of these subjects which Polanyi has earlier articulated in a tangential fashion. But Meaning does more than this: Polanyi regards these topics as endangered species of human meaning in the modern world and he seeks to develop an epistemolgical defense or understanding of these topics which will reinstate them to a place of honor in the modern consciousness. Early in his scientific career, Polanyi was disturbed by attempts directly to control scientific research in Stalinist Russia. His interest in preserving scientific freedom and promoting scientific progress developed into a philosophic career as Polanyi took as a project the attempt to articulate the epistemological foundations of scientific knowledge and the logic of scientific discovery. As this endeavor grew into a broad-based epistemology focusing on the tacit structure of knowing, Polanyi became more and more convinced that the self-understanding of modern science and its assimilation in modern culture has been a misleading and destructive force in modern life. Polanyi began to see modern man as in the grip of a hypercritical, objectivist scientism which, in combination with his already excessive moral passions, undercuts all traditional values and meaning in human life. In his theory of tacit knowing, Polanyi tries to reverse this trend by showing the flawed, irrational nature of the objectivist myth which has captured the modern imagination. Against the claims of an objectivist epistemology, Polanyi has argued that knowledge is grounded in a person's understanding which in turn is rooted in belief dynamically appropriated in the tacit dimensions of skilled personhood. Polanyi's articulation of his theory of tacit knowing has, however, been most often used as a way to understand man's perceptual and particularly his scientific knowledge. The domain of discussion in his writing until recently has been the area of what he calls natural coherences (i.e., perceptual and scientific meaning). In studying myth, religion and art in Meaning, Polanyi self-consciously attempts to extend his epistemological analysis of meaningful forms to a new class of forms (artificial coherences such as those of art, myth and religion); it is this class which Polanyi believes to be an important source of holistic, encompassing meaning in human life that reductionistic critical thought has particularly undercut:

> In order to hold these meanings securely in the reverence they seem to him to demand, contemporary man therefore needs a theory of these meanings that explains how their coherence is no less real than the perceptual and scientific coherences he so readily accepts. He needs to see how his obvious personal involvements with these meanings is necessarily and legitimately part and parcel of the reality they actually have, that his personal involvement is not at all a reason to regard them as mere subjective fantasies. These meanings will then not seem to be mere appearances to him. They will seem to be in truth what they "are." That, he will believe they are what they do honestly seem to him to be.
>
> It would appear, therefore, that we need to extend our epistemology to those coherences that are often described as "artificial" as opposed to "natural."[1]

Polanyi's analysis of art occurs in the general context of a treatment of artificial coherences; his general intention in Meaning is to reclaim the validity of a kind of significance which he finds in man's myths, religions and art. Here I shall outline, critically evaluate and expand Polanyi's ideas about art. In consideration of space limitations, this will be done in relative independence of a discussion of myth and religion, two other artificial coherences with which Polanyi finds art naturally linked. Polanyi's aesthetic thought may generally be taken as a consideration of art as a meaningful form. It treats both the structure of the artifact and the structure of an audience's appropriation of this form. In a sense, Polanyi moves beyond a theory of interpretation here though many elements of his thought bear directly upon the nature of interpretation. Some of the suggestions which I have made in the preceding section about the personal character of textual interpretation are grounded in the perspective Polanyi offers in his epistemic analysis.

---

[1] M, pp. 68-69.

SECTION B:

TWO TYPES OF MEANINGFUL FORMS: INDICATIVE AND SYMBOLIC

For Polanyi, human knowing is a tacit integration of particulars; it involves movement from subsidiarily known or indwelt aspects to the joint meaning these aspects constitute. The two terms involved in this movement are the proximal or tacit term and the distal or focal term; the meaning of the proximal term appears only in terms of the distal term. The meaningful form which we focally appropriate is as, a phenomenon, a comprehensive entity; it unites in a focal image the subsidiary particulars which have meaning (i.e., are subsidiarily known or tacit) for the interpreter. According to the structure of tacit knowing, meaning is displaced away from the person. The act of pointing can again be used to illustrate the dynamic involved here. An interpreter does not merely look at the finger directed outward but at that toward which it is directed. The meaning of the act of pointing is that we take note of because of the act.

Polanyi claims that the from-to dynamic involved here is basic to all human understanding. His writing has sought to show that human endeavors ranging from visual perception to brilliant scientific discovery are achievements of tacit knowing. Visual perception "consists in seeing the joint meaning of the responses evoked in our body by the impact of light."[2] Scientific discovery involves the imaginative perception and solution of problems by skilled practitioners in a community of like minds; scientists intuitively combine clues (tacitly) in problem solving and thereby reveal hitherto hidden aspects of nature.[3]

In his recent writing, Polanyi has focused on the aspect of intention involved in all types of tacit knowing. Performing a

---

[2] Michael Polanyi, "Meaning: A Project," unpublished lectures forming background of Meaning (delivered February-March, 1969, at the University of Chicago and the University of Texas), Lecture 1, page 4.

[3] M, p. 57ff for a discussion of scientific discovery.

XUM

skillful act of integration involves a preliminary intention on the part of the agent/performer. Such an intention expresses an end or goal which the agent has the insight to imagine as realizable. Imagination thus is a central ingredient in all knowing achievements: "We now see that not only do the scientific and the humanistic, both involve personal participation; we see that both involve the active use of the imagination."[4] Imagination implements and sustains meaning. This is particularly true with man's use of language. In grasping the meaning of a word, we imaginatively bring to bear all the previously encountered instances of its use:

> Each of these instances was clearly distinguishable from the others and was yet covered by a single conception. As we now add an additional unprecedented instance to this range, we enlarge the meaning of the word to this extent. We have evidence of this steady modification of the meaning in the way it substantially changes the meaning of words from generation to generation. . . . Our imagination is set upon expressing our meaning or of understanding what another person means and this effort of our searching imagination implements its own fulfillment. Perception, body motions, and the use of language all work under the same law.[5]

It is, of course, true that any meaning produced by anticipatory thrusts of imagination can be destroyed. An integration of particulars can fall apart from disuse and old age or, in a more immediate fashion, by shifting our attention. The meaning of a word, for example, is lost if we repeat it incessantly until all we can focus upon is the sound. In this case the shift is from what _is_ the meaning to what _has_ the meaning. In Polanyi's view, the critical quest for an objective truth that characterizes the mind set of the modern era often succeeds in destroying meaning by confusing these two.

---

[4] M, p. 64.

[5] "Meaning: A Project," I, pp. 7-8.

The proximal term of tacit knowing as Polanyi has defined it has a degree of transparency. Its significance, like the pointed finger, appears in terms of that which is intended or attended to. The from-to movement of knowing thus argues against any associationist theory of meaning:

> But as we have seen, a word has a _meaning_. It _bears on_ something else which is its meaning. A word and its object are not equal partners in an association.[6]

A pointed finger or a word and an external object have not simply become linked because the finger was seen or the word was heard in the presence of an experience of a certain object. This view would assume the word has some intrinsic interest:

> Equal partners in an association are in fact easy to distinguish from the relation of names to their object. On entering Trafalgar Square in London, you can see the National Gallery and the Nelson Column. Once you have looked at them in turn, each might recall the other in an equal manner. But suppose you become aware of a tourist guide pointing at the Nelson Column; you notice the Column and the guide's finger in two different ways. The Column is interesting in itself, but the guide's finger is

---

[6] _M_, p. 69.

> interesting only in its capacity for directing attention to something other than itself. If the guide then tells his audience the name of the Column, its members are not interested in the sound he utters but in this sound's capacity to direct their attention to something other than itself, i.e., the Column. They may remember both the Column and its name, but the Column will be remembered for its own sake, while its name will be remembered only because of its meaning, which is the Column. The word in use has in fact no interest in itself, as an object; in this it is very different from the object it names, which is interesting in itself as an object.[7]

Tacit components or subsidiaries in most acts of knowing lack intrinsic interest. Like the words, "Nelson Column", subsidiaries are remembered only in their bearing on that which they directed attention toward. They bear upon their focal meaning in a vectoral fashion. Polanyi suggests in Meaning that most of his earlier writing has focused upon this vectoral character of tacit knowing. The types of knowing which he has considered as a spectrum running from visual perception to scientific discovery to knowledge of historical figures all have their locus of interest at the focal term. He groups together all these different types of tacit knowing in suggesting that they form a whole class of tacit operations which can be called indication. "Natural" coherences, meaningful forms whose subsidiary components lack intrinsic interest, are known in indication. There are, however, other types of tacit operations in which the interest of subsidiaries is far from negligible and these types provide the entry route for Polanyi's understanding of art (as well as myth and religion) as an "artificial" form.[8] To show that most of our everyday tacit knowing is indicative in structure Polanyi lists twelve common types of integrations; he calls these "self-centered integrations, because they are made _from_ the self as a center (which includes all the subsidiary clues in which we dwell) _to_ the object of our focal attention":[9]

---

[7] M, p. 69.

Kinds of Self-centered Integration

Sensory clues fused to perception
Two retinal images fused to three-dimensional sight
Two stereo pictures fused to three-dimensional sight
Deliberate motions fused to intended performance
Actions taken in causing something to happen
Establishment of part-whole relations
Structure of a complex entity, _e.g._, a physiology
Series of integrations forming a stratification
Use of clues to establish reality of a discovery
A stimulation identified with a simulated object
Recognition of a member of a class
Use of a name to designate an object.[10]

Self-centered integrations have, for Polanyi, their complement in meanings in which subsidiary components do not function merely as indicators pointing at something else. In certain kinds of meaning the subsidiary clues are of intrinsic interest to the integrating subject and such subsidiaries "enter into meanings in such a way that we are carried away by these meanings."[11] A person's involvement in this class of meanings is different than the type of involvement in a self-centered integration. A simple example of an entity in this class is a direct symbol such as a flag. In focally attending to the flag, what a person attends from -- memories and hopes and all that composes awareness of membership in a nation -- is of substantially more interest than the actual focal entity, the colored piece of cloth. What bears on the piece of cloth makes it something richly important and significant. The colored cloth, an intrinsically uninteresting entity, comes to "embody," "stand for," or "symbolize"[12] a nation. But this embodiment is not like the case of an intrinsically uninteresting sound functioning subsidiarily to indicate a word. It is the intrinsic interest taken in what functions subsidiarily that allows the flag to become a flag -- to stand for a nation's life and history. What bears upon the flag is

---

[8] One of the issues I shall raise below about Polanyi's conceptualization is his use of this distinction between "natural" and "artificial."

[9] _M_, p. 71.

[10] _M_, p. 71.

> the integration of our whole existence as lived in our country. But this means that the meaning of the flag (the object of our focal attention) is what it is because we have put our whole existence into it.[13]

A person surrenders or submits to a symbol like a flag in order for it to embody that which it does for him:

---

[11] M, p. 71.

[12] M, p. 72.

[13] M, p. 72.

XUM

> Some of those subsidiaries, then, that bear upon the flag and give it meaning are our nation's existence and our diffuse and boundless memories of life in it. These, however, not only bear upon the flag as other subsidiary clues bear upon their focal objects, but they also, in our surrender to the flag, become embodied in it. The flag thus reflects back upon its subsidiaries, fusing our diffuse memories.[14]

The focal object thus directs attention back to that attended from initially in attending to the focal object. In surrendering to the focal object which has come to embody a whole complex of meaning "we accomplish the integration of those diffuse parts of ourselves that are related to these persons or things"[15] (*i.e.*, the whole complex of meaning). To surrender to symbols is "at the same time to be carried away by them."[16] Such surrendering and being carried away is a "holistic imaginative achievement of meaning, not a serialized, mechanical one."[17]

Structurally, it now appears that indication and symbolization are exact opposites:

> To designate the United States is to integrate a name to a country, while to symbolize the United States by a flag is to integrate a country to a flag.[18]

---

[14] *M*, p. 73.

[15] *M*, p. 73.

[16] *M*, p. 73.

[17] *M*, p. 73.

[18] *M*, p. 74.

Symbolization has its locus of interest in subsidiaries and indication has its interest at a focus of integration. Polanyi is careful to point out that though words usually function indicatively, they can and do in myth, ritual and poetry function symbolically. When words or any other entity such as a flag have meaning symbolically (*i.e.*, in terms of interesting subsidiaries which become embodied in the entity) Polanyi calls this meaning "artificial." The whole class of artificial meanings (of which symbols are one member only) are called "semantic" meanings which includes not only meanings achieved by language but "all meanings contrived by man"[19] as distinguished from perception, skills and the part-whole relations found in nature.

The most important difference between an interpreter's response to an indicatively and a symbolically meaningful form is a difference in degree of participation:

> . . . the essential difference between indication and the whole group of meanings of which symbolization is one kind lies in the relation of the self to the whole process. Personal participation and indwelling of clues, though they are certainly always involved in all types of indications, tend, in indication, to integrate these clues into entities that seem to be projected away from the self as a center. Perception, for instance is of things seen from the self as a center. The self is never carried away in indication; it is never surrendered or given to the focal object. As we have noted, indications are always self-*centered*. By contrast, symbolizations are self-*giving*. That is, the symbol, as an object of our focal awareness, is not merely established by an integration of subsidiary clues directed *from* the self to a focal object; it is also established by surrendering

---

[19] *M*, p. 74.

> the diffuse memories and experiences of the self _into_ this object, thus giving them a visible embodiment. This visible embodiment serves as a focal point for the integration of these diffuse aspects of the self into a felt unity, a tacit grasp of ourselves as a whole person, in spite of the manifold incompatibilities existing in our lives as lived.[20]

SECTION C:

METAPHOR AND WORKS OF ART

Polanyi uses his analysis of how symbols function to develop an analysis of metaphor. He understands metaphor to be a central component of literary art and all representational art at the level of structure resembles metaphor.

Using the suggestions of Aristotle, I.A. Richards, Owen Barfield, and Max Black, Polanyi shapes his own discussion of metaphor around two problems. As a meaningful form, a metaphor yokes together diverse matters in a single whole. We take exceptional interest and pleasure in metaphors, yet they remain an enigmatic form. One problem they present is that of understanding how an interpreter grasps one idea in terms of another. How do we make the figure or vehicle a vehicle bearing on a larger whole or tenor? A second problem is how metaphors can move us so greatly. It is particularly this problem that Polanyi believes his analysis of symbols will help to clarify.

Polanyi views a reader's ability to unify diverse matters in a metaphor into a whole as an instance of tacit knowing. His treatment of knowing as a tacit integration of particulars has always emphasized that subsidiarily known particulars may vary in aspect yet a knower can tacitly bring such diversity into a focally apprehended unity. He often uses the example of visual perception to show how the seeming incompatibility of two subsidiarily known images (*i.e.*, the different perspectives of an object seen with each eye) is unified in a focal whole. In *Meaning* Polanyi extends this view in suggesting that his theory of tacit knowing provides a commonsensical way of understanding class concepts. Objects can differ in almost every aspect and yet be recognized by a person as members of a class because our recognition of the unity of such objects is tacitly accomplished.[21] A class concept or a universal is, with a formalist understanding of knowing, an enigma but, if knowing is viewed as a tacit integration of particulars, it ceases to be a problem. The category "person" is easily applied to human beings despite the fact that we recognize male, female, large, small, black, white, yellow, and red individuals; we dwell in such diversity and tacitly grasp the unity within it. The perceiver's ability to make a whole out of the diverse particulars of a metaphor is similarly an act of tacit integration. Our ability tacitly to integrate particulars is so powerful that the seemingly most non-sensical combination of words in an appropriate grammatical sequence can always find a poetic meaning as the linguist Bloomfield pointed out:

---

[20] _M_, pp. 74-75.

---

[21] *M*, p. 51ff.

> Linguists regard the sentence "Colorless green ideas sleep furiously" as being fairly safe against making sense to anybody. But it is easy to see that "green ideas sleep furiously" may mean simply that "immature ideas foster violent dreams," and with a little trouble one should be able to account also for such ideas being colorless.[22]

It was, Polanyi suggests, the discovery of our ability to put together and understand elements widely disparate that launched the revolution in poetics associated with the French Symbolists which has had such an important impact upon modern poetry.

It is not only our ability to unify the diversity of metaphoric terms, but the power metaphors have which interests Polanyi. He attempts to account for this source of power in the metaphor by linking it with his analysis of the symbol. A prosaic translation of a metaphor often borders on absurdity. The following metaphoric speech by Shakespeare's Richard II illustrates this:

> Not all the waters of the rough rude sea
> Can wash the balm from off an anointed king.[23]

Literally translated, these lines claim that the anointed balm sticks so firmly to a king that washing with all the ocean's waters will not remove it. The implication is that an annointed king cannot be deprived of his office because he cannot be deprived of his balm. Naturalistically, this is a ridiculous claim but understood metaphorically it is clear and forceful. It is not a literal claim about a physical eventuality because its meaning transcends this. These lines have a clear metaphoric significance in Polanyi's view because the tenor, an intrinsically interesting subsidiary, bears on the vehicle (_i.e._, the focal image of the seas attempting to wash away the balm), and the vehicle itself presents an interesting spectacle for our imagination which relates back to the tenor thus embodying the tenor:

---

[22] _M_, pp. 76-77.

[23] Quoted from _M_, p. 77.

> We may thus see that when a symbol embodying a significant matter has a significance of its own and this is akin to the matter that it embodies, the result is a metaphor.[24]

Polanyi speaks of the metaphor as having dual centers of interest. First, like the symbol, the subsidiaries are an item of interest; the whole issue of Richard's right to the throne is the important indwelt context from which a reader attends to these lines. But the focal image itself here turns out to be an imaginative, evocative image. This image, like the symbol of the flag, comes to embody that which the reader attends from even though it has a certain directionality or capacity for capturing the imagination in itself:

> The tenor bears on the vehicle but, as in the case of a symbol, the vehicle (the focal object) returns back to the tenor (the subsidiary element) and enhances its meaning, so

---

[24] _M_, p. 78.

XUM

> that the tenor, in addition to bearing on, also becomes embodied in the vehicle.[25]

Polanyi attributes the power of the metaphor to the fact that the perceiver's life is itself partially caught up in the dual centers of interest of the metaphor. We surrender to the metaphor a part of our own lives, which, in functioning subsidiarily, is embodied in the terms of the metaphor as they relate to each other:

> As in the symbol, so in the metaphor the subsidiary clues -- consisting of all those inchoate experiences in our lives that are related to the two parts of a metaphor -- are integrated into the meaning of a tenor and a vehicle as they are related to each other in a focal object (a metaphor). The result is that a metaphor, like a symbol, carries us away, embodies us in itself, and moves us deeply as we surrender ourselves.[26]

In summary, Polanyi's analysis of metaphor sets forth two levels of operation for the metaphor. The tenor of the metaphor in functioning subsidiarily for an interpreter comes to bear on and be embodied in the focal vehicle which has a certain interest in itself and therefore evocatively reflects back on the tenor. But the related subsidiaries of the perceiver's experience also bear on and come to be embodied in the relationship constituted by the tenor's embodiment in the vehicle. The interpreter's response in understanding the metaphor is thus an experience which Polanyi terms being "carried away."

Polanyi's treatment of metaphor focuses on both the element of incompatibility or diversity in the metaphor and the two centers of interest; he understands the structure of all representational art along lines akin to this interpretation of metaphor. The two separate but equally interesting components of metaphor are made to bear on a joint meaning which combines the two. In the same way the formal features of a poem can be seen as interesting or pleasing separate features which, when known subsidiarily, bear on a rich joint meaning:

---

[26] M, pp. 78-79.

> In reading a poem we are aware subsidiarily of its rhythm, its rhymes, its sounds, its grammatical construction, and the peculiar connotations of the words used. Each of these components can be examined separately, in itself, but this inevitably dims and may even efface the meaning of the poem . . . . In any case, our awareness of the components, which we have focally examined, must once more become subsidiary if we are to see the poem's meaning.
>
> In other words, the rhythm, rhyme, sound, grammar, and all the other more subtle formal aspects of a poem, along with the several allusions of its parts, all jointly bear on the meaning of the poem. We are not therefore aware focally of what they add to that meaning and how they affect its quality.[27]

A poem's meaning is a whole imbued with a rich pattern of subsidiaries. Polanyi suggests that such subsidiaries endow the poem with harmonies that other speech lacks and establish the poem's "claim to be received for its own sake."[28] By this Polanyi means that the poem is detached "from the ordinary run of life."[29]

The poem's story is not heard as a recitation of the facts of life, but "asks to be heard instead by the imagination."[30] The poem

---

[27] M, p. 80.

[28] M, p. 80.

[29] M, p. 80.

[30] M, p. 80.

XUM

is recognized at least subliminally by the reader as an artificial coherence because he subsidiarily integrates what focally appears as disparate formal features (e.g., rhyme, rhythm, etc.) and the story (i.e., the denoted significance). These subsidiaries which in fact virtually create the poem as a poetic statement also detach the poetic statement:

> The sonnet as a work of art is not merely enriched and altogether recast by its poetic subsidiaries; these subsidiaries also serve to cut the sonnet off from the person of the poet.[31]

Though all kinds of meaningful coherences are created by the imagination, those artificial coherences of art forms are decisively different than most other meaningful forms. The scientific discovery requires great imagination in its original conception but, as the discovery is assimilated into the paradigm of scientific knowledge, it becomes routine knowledge requiring little effort to comprehend. The discovery of an inventor requires exceptional imaginative creativity on the part of the creator but as the mechanism passes into general use, those other than the inventor need to have little appreciation for the meahcnism to employ it. The artificial coherences of art forms, unlike these types of coherence found in daily life, live only by being constantly re-constituted in imagination by perceivers:

---

[31] M, p. 84.

> The capacity of a creative artist's imaginative vision may be enormous, but it is only the vision that he imparts to his public that enables his art to live for others. Thus the meanings he can create for his public are limited by the requirement that they provide a basis for their re-creation by the imaginations of other viewers or readers. The *use* of a work of art by others is not, therefore, like the use of an invention such as the telephone. We do not have to recreate A.G. Bell's imaginative vision of the telephone in order to use it, nor do we have to do this in order to know and use Newton's laws. But we do have to achieve an imaginative vision in order to "use" a work of art, that is, to understand and enjoy it aesthetically.[32]

It is the subsidiary components of the form which give the form its "frame" or artificiality and thereby give the coherence a kind of reality and integrity of its own that is independent of its creator:

> It is, however, fortunate that our vision does not have to include the artist's strictly personal feelings, memories, etc. It does not have to because, whenever our powers of integration produce a coherence, they do so by cutting off the subsidiaries of this integrated body from connection with other experiences. This, in fact, is the principle which turns every discovery, invention, or work of art into a sort of reality with life, so to speak, of its own -- into a body of living thought severed from continued dependence upon the personality of its maker and thus capable of being understood by other personalities.[33]
>
> Thus the formal structure of a poem, which has so much of the poem's meaning in it, forms a blockage, insulating the poem from everyday affairs and so also from the poet as a private person. When entranced by a poem, we repeat its words through our lifetime; strictly speaking, it is *the poem* that speaks to us, not the poet.[34]

But the artificial coherence is equally independent of any direct bearing on its perceiver's life. We do not respond to its meaning as we would to a similar meaning in everyday communication. A

---

[32] *M*, p. 85.

[33] *M*, p. 85.

[34] *M*, p. 86.

XUM

murder in a play at the theatre does not elicit either an attempt to rescue the victim or a call to the authorities.

The poem, however, does have an important indirect bearing upon the perceiver's experience. In the integration which grasps an artificial coherence, the perceiver is deeply involved in the particulars. Polanyi, following suggestions of Eliot and Richards, claims, as he did in his analysis of the power of metaphor, that elements of the perceiver's experience are subsidiaries of the perceptive act which become unified and embodied in the artistic form:

> Something more than the integration of its frame and its story therefore occurs in our grasp of the reality of a poem. The poem takes us out of the diffuse existence of our ordinary life into something clearly beyond this and draws from the great store of our inchoate emotional experiences a circumscribed entity of passionate feelings. First the artist produces from his own diffuse existence a shape circumscribed in a brief space and a short time -- a shape wholly incommensurable with the substance of its origins. Then we respond to this shape by surrendering from our own diffuse memories of moving events a gift of purely resonate feelings. The total experience is of a wholly novel entity, an imaginative integration of incompatibles on all sides.[35]

In summary, Polanyi holds that the poem as a coherent form comes alive only in its perceivers' imaginative integration of its particulars. But these particulars, when viewed focally, are elements logically incompatible; we yet succeed in uniting such incompatibles through the efforts of our imagination and come to perceive the wholeness of an artificial coherence:

---

[35] M, p. 88.

> . . . we succeed in integrating these incompatibles -- the artificial pattern and the prose content -- and by doing this we produce a joint meaning which is the meaning of the poem. *Logically* speaking, however, these parts of the poem would still be quite incompatible. In imaginatively attaining this meaning we are subsidiarily aware of its two components, which, viewed in themselves, are explicitly or logically incompatible but which, when combined by an artistic imagination, speak in one voice as the subsidiaries of the poem's meaning.[36]

Such an artificial coherence has a reality and a meaning detached from its creator's life and from our own everyday existence:

> This integration of parts in the meaning of a work of art is but an instance of the rule -- exemplified in many different ways in our present work -- that the integration of subsidiaries produces a perception differing in both appearance and content from its constituents. What is produced by the *poetic* imagination, however, is a *radical* novelty, and its reader absorbs this novelty by the powers of his own imagination. Thus we, the readers, come to share in our enjoyment of a poem the detached position the poet has in his relation to his own poem. He has sent it forth into the world, detaching it even from his own daily affairs by giving it its artificial frame. We are able, therefore, to enjoy it *in itself* -- not as we enjoy the satisfaction of our personal desires. This is how we can watch a murder in a play in integrated conjunction with its theatrical subsidiaries without either jumping up to rescue the victim or feeling the action on the stage -- the pretense of a murder to be nonsensical. We accept the clues which the play offers to the imagination for sharing its meaning, and we live in this meaning rather than the meaning these events would have for us in our ordinary "interested" lives.[37]

---

[36] *M*, p. 86.

[37] *M*, p. 87.

The meaning which the artificial coherence does have succeeds in moving us deeply because it unifies and embodies the diffuse feelings related to its subject matter in our own lives. Its firm coherence thus has both power and durability as it speaks to the imagination:

> From the vantage point of this analysis we can see that poems and also paintings, sculptures, and plays are so many closed packages of clues, portable and lasting.[38]

As this terse definition suggests, the analysis of poetry as an artificial coherence can be extended to other art forms. What Polanyi discusses as the incompatibility of elements or the "frame" effect of poetry can be found also in drama and painting. Drama requires of its audience the uniting of the incompatible elements of recognized stagecraft and a story in order to attend to its meaning. The appreciation of a normal painting involves the conjoint vision of a flat canvass on which there are brush strokes and a scene with depth:

> The conflict between the portrayal of depth in the painting and the flatness of its ground is resolved by the same mechanism which fuses the contradictory parts of a metaphor. This same mechanism also fuses the formal pattern of a poem with its content (that part of it that can be given in prose). Thus the painting as a work of art is unified in terms of visual qualities that do not exist in its separate parts.[39]

To grasp the anomolous reality of an artificial coherence, a person must tacitly integrate elements dramatically opposed. Polanyi calls the kind of integrations which imaginatively perceive such anomolous wholes as a flat perspectival image "transnatural" rather than "natural" integrations. An artificial coherence is therefore a "transnatural" phenomenon.[40]

---

[38] M, p. 87.

[39] M, p. 90.

An artificial coherence or transnatural expression gains in its detachment from ordinary experience a kind of reality and integrate of its own. Polanyi extends this point with reference to painting and drama by showing how these art forms never really aim at creating an illusion of reality. Despite the centuries in which painting ostensibly aimed at a simulation of the natural order, works which could be mistaken for the things which they represented were rarely produced, and those which were produced were not celebrated. Polanyi understands this as indicative of the fact that art is trivialized when it creates the illusion of a natural reality; the status as a transnatural reality which it normally enjoys is lost if art becomes illusory:

> We have yet to explain why an illusory likeness of its object was not acclaimed as the perfect achievement of simulation. The answer may be found, as we have seen before, in the superiority of poetic expression over the effect of our personal experiences. When we see the external objects represented in a painting as though they were these actual objects, their significance is reduced to being some objects

---

[40] _M_, pp. 125-26. See also Michael Polanyi, "What is a Painting," _American Scholar_ (Autumn, 1970), p. 663.

> among innumerable others, which usually means that they will be seen from a trivial point of view. We realize instantly the abysmal triviality to which a still life by Cezanne would be reduced were it made to convey the perfect illusion of real fruits and vegetables offered for sale in a niche in an art-gallery wall. We can then appreciate the fact that the joint integration of brush-strokes and canvass lends to all paintings a distinctive artificial quality which distinguishes them from all natural sights. It secures the _artistic reality_ of a painting and so guards its distinctive powers from dissolving into the surroundings of _factual reality_.
>
> . . . An actor playing Hamlet who created the illusion that he was _actually_ dying from the poisoned rapier of Laertes would produce a disgusting disturbance. His aim must be to produce the play in which Hamlet is killed by Laertes.[41]

The work of art can, because of its incompatible elements, be said to represent facts of the imagination rather than facts of everyday experience:

> A work of art represents certain facts of the imagination. It does not affirm any fact of _experience_. If we believed a work of art to be simply affirming certain facts of experience, we would not see it as a work of art. It could at best be seen as a clever illusion -- worthless to us as art. Appreciation of a work of art requires belief in what it _means_, not unbelief in something it does not and must not assert.[42]

The belief in the meaningfulness of the artificial coherence -- the belief on the part of a perceiver that the seemingly incompatible features can yet be imaginatively made compatible in a joint significance -- is the key to the successful functioning of art.[43] It is not, as Coleridge taught, a suspension of disbelief that gives the artificial coherence its power but the opposite. Polanyi understands Coleridge's view as the response of the Romantic movement to the trends in aesthetic thought prevalent since the period of Plato. Plato set the tone of later aesthetic discussions by criticizing artistic mimesis as a falsification of truth. Plato's views were both a reaction to a fifth-century B.C. artistic shift toward naturalism (from what Gombrich calls "making" to "matching" -- from symbol making to simulating objects)[44] and an expression of the philosophic tendency to distinguish between appearance and reality. Coleridge as a Romantic mitigated the Greek critique of mimesis by claiming art does not imitate but is in content predominantly an expression of subjective feeling. Polanyi believes that the skeptical post-Romantic period undercut all traditional values including the Romantic respect for the individual and left artists believing that true art can express no positive content:

---

[41] _M_, p. 92.

[42] _M_, p. 92.

---

[43] An audience's ability to respond imaginatively in integrating the incompatibles of the art work Polanyi sees partly as the result of public familiarity with style (*i.e.*, broad social acceptance and recognition of a certain kind of imaginative integration) but particularly in modern times with our rapid stylistic transformations, also the role of the critic as interpreter has aided appreciation. In painting the battle between academic and bohemian art spawned a generation of critics who literally taught the public how to view the new art. General resistance to artistic innovation has been reduced; the relation between artist and public is now such that the artist can depend on at least a small part of the public imaginatively to struggle with whatever new forms are presented. *M*, p. 92ff.

[44] *M*, p. 110.

> But the progressive sharpening of skeptical thought, leading to the wholesale questioning of all traditional values, including the value of the individual person, espoused by the romantic movement, was presently to make any emphatic statements of man's deeper feelings sound trivial and to make their expression in conventional artistic patterns sound false. Plato's critique of art, showing that artistic mimesis is a falsification of truth, thus reappeared in our day to support an attempt to make art abandon all explicit expression of positive content. An explicit expression of our inner states was considered too trivial; an explicit expression of the truth about things, impossible.[45]

This attitude launched the poetic experiments of Baudelaire, Rimbaud and their descendants. They condemned the world as absurd and represented its fragmentation but ironically their works gave imaginative life and meaning to this fragmented vision:

> Because painters and poets condemned the world as absurd, they represented it as a heap of fragments. But because they were artists, their vision brought this supposedly dead pile to life in their works of art! These artists thus preserved the honor of their nihilistic protest by cutting the world to pieces; but they inadvertently triumphed over this destruction of meaning in our social life by evoking in this rubbish meaningful images never witnessed before. This triumph at once crowned the artists as creators of meaningful visions and succeeded in allowing them, in their own minds, to leave the "pile" there as an expression of protest against the chaotic conditions of the age.[46]

---

[45] M, p. 110.

[46] M, pp. 115-16.

In painting and sculpture in Post-Impressionist movements, the same kind of skepticism about the meaningfulness and value of anything was expressed in new, highly imaginative techniques. On the stage with Pirandello the same trend is evident and in recent years the form of the anti-novel as seen in works such as those of Robbe-Grillet again reflects the artist's rejection of positive content or story.

In summary, Polanyi's response to the dominant direction of modern European art lifts up two aspects of this art. On the one hand, he understands it as motivated by a certain nihilistic vision which he equates with the growing influence of scientism and excessive moral perfectionism emerging in the nineteenth century. On the other hand, Polanyi credits modern artists who have rejected traditional forms and values for what are in his view false reasons, with creating exceptional new imaginative possibilities for experience. He calls the innovative painting and literature of the last hundred years "visionary art." Visionary poetry is

> "visionary," for its meaning is created by a powerful act of the imagination which comprehends all details in one. It must be grasped by a visionary experience, as the poet himself grasped it in his act of creation.[47]

Visionary art demands of its audience a certain tolerance for its inability to be translated into other, more sensible prosaic terms; it requires very deep participation in its fragments in order to bring them into unity:

---

[47] M, p. 112.

> To understand such plays, films, or novels, we must train ourselves -- following the visionary precepts of Rimbaud -- not to ask questions to which there are no answers. Only in this way can we induce our imaginative powers to form a joint vision of the fragments before us.[48]

Only the exceptionally challenging fragmented character of modern art, Polanyi concludes, makes it clear that all art seeks not to simulate something tangible but strives to create facts of the imagination.[49]

Finally, Polanyi's reflections on aesthetics offer some suggestions about the nature of artistic creativity. He finds it important to analyze artistic creativity in relation to the domains of scientific and technological creativity which dominate the modern era. Artistic creativity, technological innovation, and scientific discovery all depend heavily on the imaginative faculties of persons involved in each area. Polanyi understands the artist's power imaginatively to make novel artificial coherences as sharing something with both scientific discovery and technological invention:

> The quest for scientific discovery also integrates fragmentary clues to an initially unknown coherent meaning (although the quest is guided vaguely by certain powers of anticipation), whereas technical invention starts, on the contrary, by aiming at a product that will fulfill a definite function and seeking the means to contrive it. To produce a work of art is to make something never before seen but grasped in a vague way by powers of anticipation,

---

[48] M, p. 114.

[49] M, p. 115.

> and in this essential feature the artist's quest is nearer to that of the scientist than to that of the inventor. This may seem strange, for the artist does not find things hidden in nature, as the scientist does, but contrives his product as inventors do.[50]

In terms of his subsidiary-focal distinction, Polanyi summarizes the artist's problem as that of both the scientist and the inventor:

> A scientific problem consists of subsidiaries anticipating an unknown focus. A technical problem consists of a desirable focus anticipating subsidiaries that will implement it. The scientist's quest has the structure of asking "What do these words mean?", while the engineer's quest has the structure of asking "What words will express my meaning?" To search for words to express one's meaning may seem to be exactly what a poet does and hence to be, perhaps, central to all art. But remember that the meaning of a poem comes into existence only with its words. The poet starts with a problem that is largely indeterminate at both ends: it is open in its aim as much as in the means it uses for achieving it.[51]

Means and ends are continuously interacting in artistic problem solving. Polanyi sees this situation of the artist as parallel to the natural process of physical maturation in a child; art therefore for him becomes a kind of deliberate growth of man not as a purely natural but as an existential and social creature:

> They [artists] search for means of solving a problem -- a problem which was conceived for this very purpose, *i.e.*, its solution; and they pursue this quest while continuing to shape the problem so that it will better fit the means

---

[50] *M*, p. 98.

[51] *M*, p. 98.

XUM

> for solving it. The way a child grows to a higher level of physical maturity provides us with an illustration of how this kind of creative process, involving a continuous interaction of both means and ends, operates. But this is a work of nature. Art is the deliberate creative growth of man's experience.[52]

The artist in imaginatively anticipating a novel artificial coherence looks forward to what as a fact of the imagination could exist. In creating this possibility in his own imagination and, then in embodying it in the artifact, the imaginative horizons of the public are expanded; the artist thus deliberately adds meaning to the human world:

> An artistic problem is the imaginative anticipation, not of unknown facts that already do exist, in some sense, in nature, but of a fact of the imagination -- of a poem or a painting that could exist. We have noted that the artist's work is a constant invention of means for expressing his aims, coupled with readjustment of his aims in the light of his means. This manner of deliberate growth resembles scientific or technical inquiry in sometimes offering opportunities for sudden inspiration and at other times demanding the taking of infinite pains.[53]

The arts aim at transmitting their imagination to the public. Scientific and technological innovation depend on imagination but, unlike art, after the moment of discovery, they become routinized; the fusion of previously unconnected clues becomes a quietly accepted fact. The artificial coherences of art require everlastingly, on the part of the public, that their disparate particulars be imaginatively forged together:

---

[52] M, p. 99.

[53] M, p. 99.

XUM

> The metaphor will continue to feed much of the imaginative fire that served to create it, and those who respond to the metaphor will continue to be moved by answering visions and feelings.[54]

In the artist's shaping and solution of his artistic problem, he creates an artificial coherence which is detached from his person and lives by the imagination of those who receive it. The artifact itself which represents both problem and solution finally differs decisively from the imaginative discoveries and inventions of science and technology. The scientist claims universal validity for his discovery insofar as it meets his self-set standards of value. The individual scientist has his own style of setting up problems and pursuing them. A scientific discovery, once made, is presented to peers for examination and verification; as it is accepted, it loses its connection with the particular self-set standards and style of problem solving of its discoverer. The discovery modifies views and standards held by others but is then put to use in further inquiries of other scientists. The work of art, like the discovery, claims a certain kind of broad validity for its vision but, unlike the discovery, it preserves and makes claims for the particular personal shaping of the artistic problem by its creator:

> But the maker of a work of art claims more than this. A work of art bears the mark of its creator. Name a major painter or sculptor, poet or playwright, of past centuries,

---

[54] M, p. 101.

> and his manner will readily come to the mind of many lovers of his art. . . . By framing his work, the artist detaches his product from his personal life, but by this very act he includes his own unique artistic problem and his solution of it in the frame that demarcates the property he offers to the public.[55]

A scientist does not regard the fact that he has created a certain theory as adequate grounds for the theory's acceptance. The validity of a theory is judged by the scientific community as a body. But an artist must finally obey the dictates of his own critical judgment in setting up and solving his problems:

> Art has no tests external to art. Its making and acceptance must therefore be ultimately grounded on the decision of its maker, interacting, it is true, with both tradition and the public's present inclinations, but nevertheless interacting by and through the maker's own judgment.[56]

SECTION D:

SUMMARY

Polanyi's analysis of art focuses on the structure of art as a meaningful form. Extending the epistemological apparatus developed in earlier writing, he attempts to make a general distinction between "naturally" and "artificially" coherent meaningful forms. In the former category, Polanyi includes all types of meaning which are achieved when a person attends from subsidiarily known particulars to a focus of intrinsic interest. Most human knowledge ranging from perceptual to scientific knowledge is of "natural" coherences. In the latter category, Polanyi groups several types of meaningful forms, the symbol, metaphor, and painting, poetry and representational art generally, which he argues lack the vectoral epistemic structure of "natural" coherences.

---

[55] M, p. 102.

[56] M, p. 103.

Polanyi understands symbols, in contradistinction to indicative meaningful forms, as having subsidiaries which are of more intrinsic interest than the focal object of knowledge. Subsidiary particulars are not merely indicators pointing at a focus but are subsidiaries which become embodied in an intrinsically uninteresting focal object of attention. The focal object, in synecdotally standing for a broader range of concern, can be said to direct attention back toward its subsidiaries. A person must "surrender" to the symbol in order for it to be a symbol (i.e., embody that which the person attends from in appropriating it). Such "surrendering" involves allowing diffuse personal memories to be united in a felt unity in a focus. The integration that grasps a symbol is thus a self-giving (as opposed to the self-centered integrations of indication) integration for Polanyi; it necessarily involves a deeper, more emotive self investment in shaping meaning than does a vectoral of indicative integration.

Polanyi's analysis of metaphor as a meaningful form is built directly upon his analysis of the symbol. He holds that a metaphor embodies an interesting tenor in a vehicle or figure which has a certain interest of its own. A reader is able to unite these diverse but equally interesting terms of a metaphor through his tacit powers. The tenor thereby comes to bear on a vehicle which in turn embodies the tenor. The power of the metaphor Polanyi believes rests in its ability to unify aspects of its perceiver's life which are related to its content. The subsidiarily held tenor becomes embodied in a vehicle and the whole relationship between these terms is infused with the subsidiary memories of the perceiver. The interpreter's response to the metaphor is thus an experience of being "carried away."

Polanyi moves from his view of metaphor to analysis of poetry, painting, and drama. He sees the element of incompatibility found in the terms of a metaphor to be a constituent of all representational art. In a poem the elements which, when focused upon, are the formal features of poetry (rhyme, rhythm, etc.) are interesting pleasing components which are quite distinct from each other and from the story (i.e., the plot line if one is separable from other components). The integration of story and such diverse features is an unnatural integration because such features on a focal view are regarded as logically contradictory. Only when such features and the story become subsidiary elements bearing on the whole they jointly compose (i.e., when a tacit integration of all parts occurs) does the meaning of the poem qua poem appear. The meaning of the whole is endowed by its subsidiaries with harmonies which other speech lacks and is set off from ordinary communicative expression. The poem is recognized as an artificial coherence because its meaning is achieved only through an integration of incompatibles. Its artificiality detaches it from the life of its creator and from the everyday life of its audience; the poem thus achieves a kind of reality and integrity of its own. A poem and other artificial coherences generally continue to live and to function for persons only insofar as perceivers re-constitute the imaginative vision that first created them by unifying their incompatible elements. Works of art are thus unlike most meaningful coherences in which the extreme imaginative effort of a discoverer soon becomes a routinized integration. Because works of art live by evoking imaginative heuristic efforts, Polanyi thinks of works of art as closed, portable and lasting packages of clues. In speaking to the imagination in a way that detaches it from ordinary affairs, the poem is enjoyed in itself; a perceiver accepts the clues offered to the imagination and lives in an artificial meaning produced by integrating such clues. This transnatural or transnormal meaning is different than the meaning which such clues might point to in the interpreter's ordinary interested life. Polanyi thus thinks of the poem as referring to facts of the imagination rather than facts of our natural lives. Like the metaphor, a poem or any other type of artificial coherence has great power over its perceivers because it unifies and embodies diffuse feelings related

XUM

to its subject matter. The subsidiaries through which we attend to the poem's wholeness are not only those logically incompatible particulars but also include our own deep diffuse feelings which become embodied in that we attend to.

Polanyi extends his analysis of poetry to several other forms of art showing that the epistemic structure of all artificial coherences includes incompatible particulars. The work of art thus has a frame effect which marks it as a heuristic device speaking to the imagination. Drama requires the tacit integration of recognized stagecraft and story in order to attend to its transnatural meaning. Normal painting has its meaning by uniting perception of flatness and brush strokes and a natural scene with depth. In integrating these contradictories a perceiver sees the transnatural phenomenon of a flat figure with perspective. Polanyi argues that drama and normal painting, like poetry, never aim at a complete simulation of natural, everyday reality for such an aim would succeed only in trivializing these meaningful forms as art. As artificial coherences they require from the perceiver not a suspension of disbelief but a belief in their possibility of transnatural significance despite the apparent incompatibility of their elements.

Polanyi understands trends in modern continental painting and literature as grounded in a hypercriticial nihilistic vision of life which has attempted to purge art of any expression of positive

XUM

content. Modern painters and writers have succeeded in their protest against traditional values and forms in developing new techniques, styles and art forms which are even more challenging than the work of most of their predecessors. Polanyi calls such art "visionary",since it requires exceptional imaginative effort on the part of the perceiver tacitly to integrate its fragmented details into a joint meaning. Our participation in shaping meaning is exceptionally broad; Polanyi sees the very fact that we can make modern art meaningful as evidence that all art strives to create imaginative transnatural significance and not a simulation of everyday reality.

Polanyi views artistic creativity as a kind of problem solving akin to both imaginative scientific and technological work. A scientist works with clues or subsidiaries in anticipating an unknown focus; an inventor understands his focus or end and seeks to discover subsidiaries or means to achieve it. The artist's problem combines the difficulties of both the scientist and inventor: he must imaginatively shape a problem, discover the means to implement his goals and, in the process of implementation, readjust his ends as his discovered means dictate. Polanyi compares this doubly indeterminate process by which a work of art emerges with the indeterminant biological process of maturation in a child. Art, insofar as it lives by training the imagination of a public to appreciate its meaning, thus becomes for him a kind of deliberate growth of meaning in public life.

Finally, Polanyi suggests that the kind of validity claimed by the work of art is somewhat unique in human affairs. The problems and discoveries of science are judged by the scientific community as a body. The artist's choice of problems and his creations are also judged by peers and by the larger public. But an artist's ultimate justification for his work is not its acceptability but his own sense of having fulfilled his personal standards.

CHAPTER X

POST-CRITICAL AESTHETICS: A CRITICAL EVALUATION

The preceding discussion has outlined Polanyi's approach to the work of art. This chapter seeks critically to evaluate and to expand some of Polanyi's ideas. I shall treat his analysis point-by-point appraising its claims, extending its logic and sometimes simply attempting to interpret what I believe Polanyi's broader intentions are. In general, I find Polanyi's work in aesthetics to be very suggestive but not as careful as his earlier philosophical writing.

SECTION A:

SYMBOL AND METAPHOR

The symbol is for Polanyi a transitional phenomenon midway between the kind of knowledge or meaning which is available in indicative integrations and the kind of meaning found in a work of art. The contrast he establishes using his subsidiary-focal distinction between meaning in which subsidiary components are fully transparent and symbolic meaning in which subsidiaries become embodied in a focal object is a clear though not particularly novel analysis of the symbol. The locus of interest of an indicative integration is wholly at the focal term; the subsidiaries of a symbolic integration are more important than the object attended to as a natural object (*e.g.*, the flag as a piece of cloth) and the natural object thereby becomes invested with these subsidiaries. With this view, Polanyi does succeed in extending his theory of tacit knowing to account for symbols.

Polanyi holds that the symbol can function as a symbol only if the perceiver "surrenders" to it. It can embody its subsidiaries (*i.e.*, the memories and diffuse experience of the interpreter) only if the interpreter allows it to do so. In allowing the object attended to to become a symbol, the interpreter is "carried away." Again, Polanyi's analysis is cogent though not particularly novel. He seems not particularly concerned to account for why an interpreter "surrenders" to certain objects he attends to and not to certain others. Why should a flag embody in a felt unity a person's diffuse past experience in a country rather than have meaning only as a colorful piece of cloth? Obviously a flag becomes something surrendered to because its interpreter is a well-socialized citizen who has understood in his interaction with others that the flag can be regarded as more than colored cloth. The interpreter in acquiring his social skills learns to surrender to the flag. Symbols function within a given social context on the basis of social interaction just as any indicative knowledge is held within a community of agents. Polanyi's failure to draw out very clearly this dimension of symbolic integrations is puzzling. All of his earlier epistemological theory and his analysis of science have from the beginning placed all discussions of the knower and the known in a specific social context. His emphasis on skills, on the self-reinforcing structure of belief systems, and his treatment of language clearly demonstrate this emphasis. As much of the following critical expansion of Polanyi's aesthetic thought will show, Polanyi's treatment of the work of art seems simply to have assumed but failed to articulate the communal horizons of the meaning of artificial coherences.

Polanyi's treatment of the metaphor focuses on two problems: how diverse matters of a metaphor are brought into a meaningful unity; how the metaphor achieves its power. Polanyi views an interpreter's ability to understand a metaphoric figure as embodying a certain tenor as simply another instance of the power of tacit understanding. While a figure and an independent context of meaning might appear as distinctly separate entities when looking focally at each, they can be brought together in subsidiarily dwelling in each and making them bear upon the whole they jointly constitute. The theory of tacit knowing as Polanyi uses it here is a particularly adept tool for understanding the unification of diversity in metaphor. Such a unification is not a formal addition or combination of metaphoric terms but is tacitly accomplished. Polanyi's perspective gains further strength as he links the problem of unification in metaphor with the whole problem of universal terms for which tacit knowing gives a plausible account.

Polanyi believes that an interpreter understands a metaphor

XUM

when he attends from a subsidiarily known tenor of intrinsic interest to a figure of intrinsic interest which becomes invested with the tenor (i.e., the figure becomes a vehicle). The process of making a metaphor meaningful is the same as that of understanding a symbol though the metaphor has an added layer of complexity since the metaphoric figure has interest in itself. Polanyi draws an example metaphor for discussion from Richard III. It seems often to be the case, however, that a reader does not know, as he does in Polanyi's example, what a metaphoric figure is to embody; the reader remains ignorant (focally and subsidiarily) of the tenor until he recognizes it invested in the vehicle. The line I discussed above from the poetry of Wallace Stevens ("The only emperor is the emperor of ice cream") is an excellent example of this situation.[1] Polanyi might classify this metaphor as "visionary art" (meaning by this that the two components of the metaphor cannot be separated except by grossly distorting the "tenor") but the dynamic he describes for understanding nevertheless seems to break down here since the tenor is not apparent as one approaches the line. I have suggested that to understand such a line a reader must first attend to its denoted meaning and then, because the reader knows he is dealing with a poem, attend from this significance to a more encompassing and satisfying level of meaning to which this denoted meaning may be harmonically linked in a pattern. Tenor is discovered in discovering that to which a figure can be linked. This explanation extends Polanyi's view of how a symbol becomes invested with significance: it points out that at least in some kinds of poetry the recognition of what a symbol embodies (or the figure in a metaphor) becomes apparent after the figure is accepted as having symbolic potential but before its significance is subsidiarily known. This situation resembles that of the scientist working with clues, believing they have a joint significance, and finally imaginatively jumping the gap to an appreciation of conjoint meaning.

---

[1] See above pages 245-47.

Polanyi accounts for the power of the metaphor along lines akin to his treatment of the symbol's power. An interpreter is "carried away" by the metaphor because diffuse experience in his own life forms part of the subsidiary particulars which become embodied in the figure as it is invested with a tenor. Polanyi's perspective here seems to represent not so much a thorough exploration of the dynamics of metaphoric understanding as an adoption of some of the views of Eliot and Richards put into the framework of his theory of tacit knowing. That Polanyi's aesthetic thought is strongly influenced by the ideas of these figures is very clear.[2] Polanyi was, for many years, a part of The Moot, an intellectual discussion group which included Eliot. Polanyi acknowledges this group as one of the primary formative influences on his thought.[3]

---

[2] As early as 1953 when Polanyi was writing Personal Knowledge, he began speculating about the nature of poetry; he mentions in a letter not only the ideas of Eliot but also those of Victor Ehrlich, Jacobson, and Empson. See Michael Polanyi, "A Theory of Poetry," from a Letter dated 19 May 1953, Gelwick Microfilm Collection of The Non-scientific Writing of Michael Polanyi, Pacific School of Religion.

To a large extent, Polanyi uses the same analysis of the power of symbol and metaphor in discussing the interpreter's involvement with the work of art. Though he focuses also on the importance of the "frame" effect with works of art, Polanyi treats poetry and drama as phenomena which come to embody the past experience of the perceiver. In general, Polanyi's discussion of the power of art is an Aristotelian account; he focuses on how the perceiver becomes deeply involved in the work and how the work becomes a moving force. Polanyi, however, in his image of the perceiver as "carried away," exaggerates and generalizes in his portrayal of audience involvement. Some artists aim at creating images which will preserve a distance between the audience and the work of art. They seek to reduce the emotional involvement and cathartic potential of the work in order that the audience may be instructed and impelled to action. Brecht gives a perhaps exaggerated statement of this intention:

> I do not like plays to contain pathetic overtones; they must be convincing like court pleas. The main thing is to teach the spectator to reach a verdict.[4]

---

[3] Gelwick, p. 11.

[4] Quoted from Eric Bentley, The Playwright as Thinker (New York: Meridian Books, 1955), p. 219.

Works of art in this vein do not disprove Polanyi's ideas about the perceiver's involvement in the work, but they do suggest that distinctions should be drawn about the different ways different types of art embody diffuse experience.

Polanyi's treatment of metaphor seems generally little concerned with the whole issue of the ambiguity of metaphoric meaning. Two points here are of concern: Polanyi's analysis does not provide a way to understand differences in interpretation of a metaphor; he does not appear to regard ambiguity as a fundamental constituent or as a virtue of metaphor. Metaphors, according to Polanyi, come to embody subsidiaries from their perceivers' lives. It would seem apparent that with perceivers whose past experience is not identical the subtle (and sometimes not so subtle) components of meaning carried by a metaphor are different. I have attempted in the preceding division to focus on this problem. Both the uniqueness and the commonality of experience of the interpreter as a social self are factors influencing interpretation. Because interpreters live in and through a common world, the diffuse experience which can become invested in the metaphoric vehicle is, as Polanyi suggests, shared experience. But because interpreters are individuals, such common experience is also interwoven with the particularity of the person's personal history and integration of all experience. Metaphoric meaning as personally appropriated thus falls within a certain range of possibilities for all interpreters, but its specific shape and nuances may vary from person to person. Dialogue about meaning is a possibility created by sociality and instigated by realization of divergence of personal understanding.

Polanyi's failure to raise and explore the hermeneutical issues presented by metaphor and art may be regarded as indicative of a more general problem with his aesthetic thought: he does not adequately emphasize the element of ambiguity in metaphor and art. A metaphor as Polanyi has shown insists that its perceivers put together disparate affairs. To understand a novel metaphor requires authentic imaginative effort. But the meaning that an interpreter is able to sense in understanding a metaphor lacks the kind of stability of a "natural" meaning. It is never simply there before us apparent to all but has a kind of fragility and elusiveness. It is enveloped in a certain kind of delicate cloth which must not be rent. R.G. Colingwood's description of the relationship between words and what they "mean" perhaps best describes the kind of meaning metaphorically or artistically used language has:

> The proper meaning of a word . . . is never something upon which the word sits perched like a gull on a stone; it is something over which the word hovers like a gull over a ship's stern; trying to fix the proper meaning in our minds is like coaxing the gull to settle in the rigging, with the rule that the gull must be alive when it settles: one must not shoot it or tie it there.[5]

---

[5] R.G. Collingwood, The Principles of Art (London: Clarendon Press, 1938; London: Oxford University Press, 1958), p. 7.

Part of the attraction and power of art and metaphor are that we are intrigued by meaning and that meaning remains only partially disclosed. Good metaphors and good art always bear reconsideration. As interpreters themselves change the possibilities of subtlety and nuance in the work are further enriched. The meaning of a metaphor or a work of art thus cannot ever be finally specified. The business of the literary sign is to be revelatory; while Polanyi seems to affirm this view, he fails to see that this possibility is closely connected with the ambiguity of art. Ambiguity and revelatory power go hand-in-hand. An interpreter approaches art and metaphor with a foreknowledge of the multivalence of the phenomena with which he is dealing; he is prepared to enjoy the meaning which he shapes and discovers without concluding that he has exhausted the richness of the phenomenon.

SECTION B:
WORKS OF ART

Polanyi uses his idea that the understanding of metaphor brings competing centers of interest into a union as the backbone of his analysis of the epistemic structure of works of art. A poem is a whole which unites separately pleasing, significant features such as rhyme, rhythm, and story; the meaning of a poem _qua_ poem is the meaning such features have when all are subsidiarily known. Each of the subsidiaries may be focused on in itself but this destroys the whole though the whole may be enriched if the studied feature is again made a subsidiary. Because many of the subsidiaries can be isolated and studied in themselves, Polanyi claims that there is a certain logical incompatibility among them. If this is not apparent with features of a poem, it is clearly visible in a work of art like a painting where flatness and brushstrokes and apparent depth are the particulars. The work of art has meaning only when such "incompatibles" are tacitly integrated; this meaning, because it joins elements which in a natural, everyday attitude are antithetical, Polanyi calls a transnatural or artificial meaning. The poem, in uniting its rich subsidiaries, achieves tight coherence and harmony which ordinary speech and writing lacks. Polanyi understands the poem as having a certain "framed" effect which the reader inevitably recognizes. The "frame" establishes the poem as an entity in itself which the reader is to deal with in terms of its own integrity and reality. The poem is cut off from its maker insofar as it is not to be regarded as an ordinary statement of the poet as person but is to be enjoyed in itself. It is inappropriate for the interpreter to respond to the poem's meaning as he might to similar non-poetic signification. For this reason, Polanyi claims that the work of art speaks to the imagination. It requires imaginative effort tacitly to integrate its incompatible particulars and their meaningful union has its significance in itself, not in terms of some external reference, personal state or situation. Polanyi thus thinks of the meaning of the artificial coherence as a "fact of imagination" rather than a fact of everyday life.

This whole epistemic analysis of the work of art is admirable in that Polanyi seems largely to have followed common sense. The work of art is clearly a whole and Polanyi's theory of tacit knowing works well in accounting for the distinctness of separate features in a work (when focused upon in themselves) and how such features are brought into a unity. Features such as rhyme and rhythm in a poem which can be pleasing objects of attention give to the poem, when viewed subsidiarily, a "frame." What interests Polanyi about the frame is that it cuts the poem off from the realm of ordinary interested communication. The poem comes to have a self-giving meaning (*i.e.*, it comes to embody diffuse experience) rather than a self-centered or observational meaning. Such meaning can be called "transnatural" and the phenomenon which has such meaning is an "artificial" coherence. Polanyi's analysis of the "frame" effect needs to be slightly modified at least to make it clear that it is not the formal features of the work of art in themselves which make a poem a poem rather than an ordinary communicative expression. It is the reader's response to such features which informs him he is dealing with an artificial coherence and should attend to a transnatural meaning. Above I suggested that a reader can read the telephone directory as he would a poem if desired;[6] this demonstrates that it is finally the intention of the reader which controls response. The formal features of a poem such as rhyme and rhythm for an experienced -- that is, a well-socialized -- reader do function to inform the reader that he is dealing with a poem which demands a certain transnormal response to language. The possibility of transnormal response to a phenomenon is thus very much tied up with the status of the perceiver as a person involved in a community which has certain conventions.

This is probably apparent in Polanyi's analysis of the issue of the poetic frame but the social character of all meaning, artificial or otherwise, needs to be emphasized more than Polanyi has done. The way Polanyi has approached the problem of the meaning of art seems easily subject of misreading. He has developed a contrast between the "natural" and the "transnatural"; he speaks of the "artificial" and the "natural" and of "facts of the imagination" and "natural facts." The terminology he has chosen is hardly neutral. His whole analysis might be taken as an apologetic for art which is grounded in a positivistic epistemology. Polanyi seems to establish a rather rigid distinction between the natural and the transnatural. I believe Polanyi ought to stress the dialectical relation between these domains rather than focus exclusively on the difference between them; if he had done this the social character of natural and transnatural meaning would be more evident. Below, I shall explore this dialectical relation by showing how the "compatibility" and "incompatibility" of elements which produce natural and framed transnatural meaning are socially determined. I shall focus on normal painting, the artificial coherence in which subsidiaries appear most clearly to be in contradiction.

---

[6] See above, page 250.

In our response to normal painting, according to Polanyi, we integrate an awareness of elements dramatically opposed; we put together an awareness of the flat canvass and the appearance of depth (i.e., the pattern of paint blobs seen as a pattern) to see the anomolous reality of a flat perspectival image. But in our normal depth perception, the situation is at least structurally the same. In glancing out the window we must integrate two images incompatible at every point. While we may not be directly aware of flatness as with a canvass, the images themselves are cast flatly upon the retina and contain no suggestions about relative depth.[7] George Berkeley[8] studied the problem of depth perception and

---

[7] B.A.G. Fuller, A History of Philosophy, rev. ed. (New York: Henry Holt and Co., 1947), p. 143.

[8] George Berkeley, "An Essay Towards a New Theory of Vision," Works on Vision, ed. Colin M. Torbayne (New York: Bobbs-Merrill Co., Inc., 1963), pp. 19-98.

XUM

concluded that depth could not be perceived if man had to rely only upon his optical fixtures. He saw that not only distance and the relative situation of objects, but also shape and magnitude "are not perceived directly by the eye, but are judged only after visual have been associated with tactile sensations and with experiences of movement."[9] The scene out the window thus appears to have depth, shape, and mass not only because we have eyes but because we can integrate the visual image with the projected knowledge that we might walk into the scene and feel the different shapes and sizes of the objects as we move around them. Because the judgment of depth involves projection of previous experience with touch and time/motion, seeing deserves to be called an incidence of knowing. This is, in fact, what Polanyi intends to imply by eliding distinctions between motor functions and external efforts to coordinate subsidiary terms.

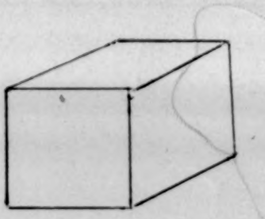
If the judgment of depth in normal seeing depends on our ability to integrate a sense of touch and time with retinal impressions, it might appear that the distinction between transnatural perception and normal perception disappears. These elements would seem to be as starkly antithetical as the flatness and the pattern of paint on a canvass. But they are not for an important reason: we learn to perform and accept the integration of the elements in normal seeing as a matter of course. Such elements become "naturally" compatible (i.e., not incompatible) because we learn to see/know in a social context -- a context always already full of meaning. As the child becomes mobile and acquainted with the features of the shared world of his family and community in socialization, he learns to see depth. As we mature, depth comes to be a primordial "natural" feature of our vision. Our skill at integrating touch, motion and retinal impulses becomes altogether second nature; part of what seeing means is to be able to distinguish objects, see depth, mass, etc. It is only the "illusory" (i.e., abnormal) phenomenon which tricks our judgment.[10]

---

[9] Fuller, p. 143.

---

[10] The degree to which context inherited through socialization shapes the so-called primordial sense data is far reaching. However, this is apparent to us only when we confront anomalous situations such as the famous duck-rabbit or a figure like the one below:



Here, the figure can appear as either concave or convex. If it is viewed one way it cannot be simultaneously viewed the other way; it may, in fact, be difficult to shift to the alternative view. The context here is deprived of sense; it lacks the particulars or subsidiaries which can stabilize identification. The view out the window always has such particulars for socialized creatures. The context for this figure is merely geometric -- lines on a white field. The perceptual psychologist Bella Julesm, "Binocular Depth

If normal seeing, as the incidence of depth perception shows, is in large measure a function of our social involvement, what of the case of transnatural perception? While almost everything which Polanyi has written subscribes to this view of the social character of perception and knowledge,[11] it is curious that the social aspect of transnatural perception has not been more clearly portrayed. I believe Polanyi begins such a portrayal in his discussion of the artificial framework of the work of art; this can be extended by reconsidering the normative character of indication. In

---

Without Familiarity," Contemporary Theory and Research in Visual Perception, ed. Ralph N. Haber (New York: Holt, Rinehard and Winston, 1968), p. 4467 calls such figures "degenerate" forms of "real-life images." Because the larger context is not full of meaning, the perceiver can project his tactile and temporal experiences in such a way that he discovers either a concave or a convex form. The real issue which I am addressing here as the sociality of perception is the same that Heidegger addresses in more expansive form when he asserts that Dasein is its "there." (Being and Time, p. 169ff). Heidegger even offers an analysis of our auditory sense that directly parallels my discussion:

> What we "first" hear is never noises or complexes of sounds, but the creaking wagon, the motorcycle. We hear the column on the march, the north wind, the woodpecker tapping, the fire crackling.
>
> It requires a very artificial and complicated frame of mind to "hear" a "pure noisce." The fact that motorcycles and wagons are what we proximally hear is the phenomenal evidence that in every case Dasein, as Being-in-the-world, already dwells alongside what is ready-to-hand within-the-world. . . . (Being and Time, p. 207.)

Cf. Being and Time, pp. 186-87 for Heidegger's discussion of sight.

[11] For example, see Polanyi's remarks on education, p. 30ff above, his understanding of science as a fiduciary community, and especially, in the case of social motor skills such as seeing, his discussion of the implications of the famous inverting spectacles psychological experiment. M. Polanyi, "The Creative Imagination," Chemical and Engineering News, 44 (April 25, 1966), pp. 86-87.

incidences of normal seeing or the normal use of language, we notice no incompatibility between the subsidiary components which we integrate to produce focal awareness. The ease of such integrations is a function of our life as social creatures. We quickly learn how to see and how to use language indicatively. Those to whom we relate and through whom we sustain our own lives abide by certain conventions which we interiorize. Elements such as those composing normal vision which might in analysis appear to be incompatible are, in the logic of communal life, made not only compatible but harmonious. The socialized individual carries with him the knowledge that such seemingly incompatible elements of vision as tactile and temporal projections and retinal impulses can and should be integrated.

The relative compatibility of particulars involved in our acts of knowing depend upon our social involvement. Particulars felt to be in continuity are particulars socially labelled compatible. This suggests that what Polanyi has termed the indicative semantic relation (a natural coherence) in which particulars are, for the most part, accepted as compatible, is the norm for our ordinary, meaningful experience in social life. This is obvious if a case as simple as seeing in depth is considered. Transnatural perception itself is, however, also normative to a certain degree. Polanyi indirectly implies this in his emphasis, against Coleridge's views, on the necessity of a perceiver's belief in the meaningfulness of art (i.e., in the possibility of uniting incompatibles). To see as meaningful the anomalous reality of a flat picture with apparent depth requires that the "incompatible" subsidiaries be socially labeled both "incompatible" and "finally compatible." The resistance which Polanyi speaks of as being encountered in the integration of incompatible elements is a socially sanctioned resistance. But we can readily see that such "resistance" is often not at all difficult to overcome. We are so accustomed to putting together flatness and the appearance of depth that we have no difficulty at all in understanding a perspectival painting. It is only in strange cases like that of the startlingly unique linguistic metaphor that the incompatibility of subsidiaries surfaces in a way that it is noticed. In conclusion, in incidences of transnatural perception/knowing (i.e., incidences of dealing with the semantic relationship held to be poetic) the perceiver ignores the social patterns for normal perception/knowing but abides by patterns of a minority covenant governing anomalies. The work of art is then an anomaly, but one which perceivers know how to deal with; this is what Polanyi means when he speaks of the framed or artificial aspect of representative art. The power that art achieves to carry us beyond the limits within which we normally perceive/know ensues from this artificiality. While it is important to recognize that transnatural perception is itself a product of our social involvement, it is also true that the subsidiaries which come to be taken for granted as components of art (_e.g._, flatness and the appearance of depth) change. In art history when a poetic changes (_e.g._, the Symbolist Revolution) or a radical new painting technique comes to be practiced (_e.g._, early Impressionism), we all, as Polanyi suggests, must learn to perceive anew.

As this explanation of "normal" or "natural" and "transnormal" or "transnatural" visual phenomenon has shown, the type of meaning a phenomenon has is defined in a context of interacting persons. The same logic can be extended to the case of poetry and drama to show how each of these art forms is a socially labeled union of incompatibles. The rhyme, rhythm, story, etc. of the poem are recognized by the experienced reader as both incompatible and finally compatible in an imaginative synthesis. The same can be said for the dimensions of stagecraft and the "story" of the drama; we can understand and enjoy a play as a play by recognizing the incompatibility of its elements even as we are on the way to tacitly integrating such incompatibility. The meaning such an artificial coherence achieves is set off from the poet's and our own normal lives; our involvement in such meaning is a deep sort of participation which flows with the action but is not arrested by our everyday reaction to similar action. The play or poem thus can function to embody diffuse elements of our own participation in shaping its meaning.

Because the perceiver of the meaning of an artificial coherence at some tacit level knows himself to be free to enjoy the work as a thing in itself, Polanyi thinks of art as a complete package of clues awaiting integration. The intention of the work in a sense has no objective outside of the evocation of its own reality; it awaits realization in the interpreter. Polanyi thus thinks of art as living only by having its meaning or vision imaginatively reconstituted by an audience. In this regard, the purpose of art can be said to differ decisively from that of inventions or scientific discoveries. Newton's laws and the telephone can be used without understanding the vision which prompted their creation; their purpose is not to evoke the meaning they have in themselves (*i.e.*, they are not a package of clues) but to promote ongoing everyday life and the meanings of that realm. Though this seems a somewhat bizarre comparison, Polanyi's point seems to be simply to repeat his basic claim: art intends to evoke meaning and its frame allows it to do this in a way that its meaning does not become subservient to other ends.

Polanyi extends this point in arguing that art never in fact aims, as was assumed for centures, at simulating the natural order. If a work of art can be mistaken for a natural phenomenon, it loses its interest and integrity as art; its transnormal meaning and power are trivialized. Since art does not merely simulate, Coleridge's famous claim that proper response to art calls for a suspension of disbelief is a misdirected appraisal of how art becomes meaningful. Rather than suspended disbelief in its reference to natural reality, Polanyi thinks artificial coherences can be understood only through belief, in spite of apparent natural contradictions (i.e., the logical incompatibility of particulars viewed in themselves), in the possibility of transnatural meaning. He claims that modern art which, due to nihilistic motivations, attempted to purge art of any "content," has made it very clear that art does not simulate natural reality but creates artistic reality or facts of the imagination.

The limited attempt Polanyi makes here to relate his own views to earlier aesthetics and to actual artistic movements is, unfortunately, painfully brief. His ambivalent atttitude toward modern European art comes directly out of his analysis of the shaping of modern consciousness which he developed earlier in his career. Modern nihilism combines the critical spirit flowing from the Cartesian philosophical outlook as transformed into scientism and the excessive moral passion of man arising about the time of the French Revolution. Modern attempts to create a pure art have been nihilistically inspired but have nevertheless created great imaginative possibilities in new forms and techniques. Modern art is the artistic face of "moral inversion"[12] though its achievements confirm that art speaks to the imagination and has its own transnatural kind of meaning. Polanyi's reversal of Coleridge's position is simply another dramatic way of making it clear that artificial coherences and transnatural meaning belong in a separate class from natural meanings. This division of human knowledge into natural and transnatural meaning must, in summary, be understood as no more than an epistemological distinction meaningful in the context of Polanyi's own perspective; it is a vehicle to affirm the importance and authentic meaningfulness of art (and myth and religion as treated in other sections of Meaning) in a hypercritical scientistic era in which all encompassing expressions of meaning which lack tangibility have come into question.

---

[12] M, p. 116.

The final component of Polanyi's reflection on the work of art focuses on the nature of artistic creativity and the validity of the created artifact. By contrasting the problem-solving of the artist, scientist, and inventor, Polanyi shows that artistic problem-solving is doubly indeterminant: it begins in an intuition of a new, meaningful form, proceeds to the discovery of means to implement its goals, and, in the process of implementation, readjusts its aims to meet the requirements of its discovered means. This novel form of reciprocating creativity which is the special possession of the artist, Polanyi believes leaves the artist alone as the final judge of the validity of his own work. Polanyi regards

XUM

artistic creation, as a process initiated and guided by the imagination speaking to itself, as a deliberate growth of human experience; it adds meaning to the human world as it transmits its imaginative vision to the public. Whatever response Polanyi's post-critical aesthetic elicits from its readers, all must at least, with encompassing claims such as this, acknowledge the authentically holistic imagination of its author. Just as an epistemology is transposed in Personal Knowledge into a Lebensphilosophie and a cosmology, so in Meaning Polanyi seeks to transpose his aesthetic into a moving vision of the world:

> We must not forget, therefore, that our over-all task in this inquiry is not simply to develop, on a sound epistemological basis, the semantics of the artificial coherences discovered (or created) by man -- as if this were a cool, professional, academic task -- but to produce, in a manner akin to art, a new moving vision of the world, imaginatively richer in the scope of its integration or disparate parts than those we have heretofore been offered by our scientific myth-makers.[13]

---

[13] M, p. 107.

SECTION C:

GENERAL CONCLUSION

This dissertation has developed a reading of the thought of Michael Polanyi and showed how his general philosophical perspective can be used to understand the nature of textual interpretation and the character of meaning in art. The project has moved from a discussion of Polanyi's thought in which an understanding of man and of human knowledge were developed, through an application of this perspective to particularized hermeneutical and aesthetic concerns. Although no single problem has been treated throughout the three divisions of this work, the scope of the whole might be seen as an attempt to present the theory of tacit knowing and show how its logic can be extended to conceptualize the nature of man's response to the work of art.

The opening division was a developmental essay portraying the shape, scope, and structure of Polanyi's philosophical thought. While working as a chemist, Polanyi became interested in the philosophical justification of scientific knowledge; the course of his life as a philosopher has been a course in which the problem of knowledge gradually became more important and more expansively explored. At first, Polanyi's discussions of knowledge were limited to studies of the scientific community and were somewhat general and sociological in character. But the main themes apparent in early writing (the importance of tradition, the role of skill in knowing, knowledge as a community product and effort, etc.) were later expanded in Polanyi's middle period in which he began seriously to develop his own epistemological model.

Personal Knowledge, Polanyi's expanded Gifford Lectures, is a massive philosophical effort that first articulated in a developed form Polanyi's philosophical ideas. Here Polanyi attacks what he terms "critical" philosophy and offers an alternative philosophical stance grounded in a skills-based generative epistemological model. The theory of tacit knowing is essentially a functional, logical and processive description of knowing which denies the validity of many of the bifurcated elements of earlier epistemologies. Polanyi's theory of knowledge and the larger philosophical outlook which rests upon it is Kantian -- it has an active sense of mind -- but it is also post-Kantian in that it focuses on both the historical (*i.e.*, knowledge is communal and temporal) and the living (*i.e.*, a person is not a transcendental unity of apperception but a biological creature) nature of the knower.

The particular way that Polanyi approaches and treats the problem of knowledge has a certain expansive character; epistemology serves Polanyi as a vehicle within which to articulate a broader philosophical perspective than is normally found under the rubric of epistemology. Polanyi's thought actually merges an epistemology, a Lebensphilosophie, an evolutionary anthropology, and an ontology. All of the more complex aspects of Polanyi's perspective are grounded in and can be traced to his basic view of knowing as a tacit integration of particulars.

Polanyi's work, after the publication of Personal Knowledge, refines and extends the basic elements of his theory of tacit knowing. The Study of Man explores the issue of historiography. The Tacit Dimension shows Polanyi's use of tacit knowing to account for sensory motor functions and innovative problem solving; it reflects Polanyi's shift away from his earlier strong reliance on commitment as the buttress of personal knowledge. Meaning extends the theory of tacit knowing to describe the special category of meaning found in art, ritual, and religion which Polanyi calls "transnatural."

The second division of this dissertation employed the epistemological model and the general understanding of man developed by Polanyi to conceptualize the nature of textual interpretation. My discussion is shaped by my interest in and familiarity with discussions about the nature of literary interpretation among literary critics. In general, I have attempted to use Polanyi's post-Kantian perspective to show that the nature of meaning in literature can be discussed in terms other than those of a two-valued subjective-objective logic. I have argued that to understand the nature of textual interpretation, the sociality of both text and interpreter must be appreciated. An interpreter is a social agent shaped in a community and operating with his tacit powers; he is a skillful being living in a common world through his use of common tools and yet a unique individual. Textual interpretation involves indwelling the text and integrating its particulars. Meaning is relational, cumulatively appropriated and personal but not private. Texts which we accept as artistic uses of language have analogical meaning. We discover analogical or harmonic meaning when we accept the appropriateness of meaning seeking acts which imaginatively transcend the denotative level of meaning by attending from what is denoted to what has encompassing significance. Readers become deeply involved in the literary text for they must open themselves to the full meaning possibilities of language. We take pleasure in both the beauty and the significance of that shaped with our involvement.

The final division of this study turned from my Polanyian discussion of the components of textual interpretation to Polanyi's own recent treatment of art in Meaning (1975). Polanyi extends the theory of tacit knowing in his new book to describe a whole class of human meanings -- those of art and religion -- which he calls transnatural. His discussion focuses on two major aspects of artistic meaning: to appreciate the work of art requires an integration of elements which are not -- to everyday sensibility --

XUM

compatible (e.g., flatness and the appearance of depth); a perceiver's involvement in the kind of self-giving integration of disparate particulars of a work of art is a deep involvement in which a part of the self comes to be projected on or felt through the artistic event. As Polanyi presents and variously develops both the elements of incompatibility and involvement, his general treatment of art emerges as a coherent, rational and suggestive perspective. I have argued that Polanyi has not been as careful in working out his aesthetic views as he was in earlier epistemological treatises. He seems not to have a very deep appreciation of the element of ambiguity in art. There is also a certain degree of confusion in Polanyi's distinction between the "natural" and the "transnatural" since he has not clearly worked out the social character of meaning in art.

BIBLIOGRAPHY

I. WORKS BY POLANYI REFERRED TO IN THE TEXT

Polanyi, Michael. Beyond Nihilism. Cambridge: Cambridge University Press, 1960.

________. The Contempt of Freedom. London: Watts & Co., 1940; reprinted ed. New York: Arno Press, 1975

________. "The Creative Imagination." Chemical and Engineering News, 44 (April 25, 1966), 85-93.

________. Knowing and Being. Edited by Marjorie Grene. Chicago: University of Chicago Press; Phoenix Books, 1969.

________. The Logic of Liberty. London: Routledge & Kegan Paul, Ltd., 1951.

________ and Prosch, Harry. Meaning. Chicago: University of Chicago Press, 1975.

________. "Meaning: A Project." Unpublished lectures forming the background of Meaning. Delivered February -- March, 1969 at the University of Chicago and the University of Texas (Austin).

________. Personal Knowledge. New York: Harper & Row, 1958; Harper Torchbook, 1964.

________. Science, Faith and Society. London: Oxford University Press, 1946; reprinted edition. Chicago: University of Chicago Press; Phoenix Books, 1964.

________. The Study of Man. Chicago: University of Chicago Press; Phoenix Books, 1959.

________. The Tacit Dimension. Garden City, New York: Doubleday & Company, Inc., 1966; Anchor Books, 1967.

XUM

Polanyi, Michael. "A Theory of Poetry." From a Letter dated 19 May 1953. Gelwick Microfilm Collection of the Non-Scientific Writing of Michael Polanyi. Pacific School of Religion.

_________. "What is a Painting?" American Scholar 39 (Autumn, 1970) 665-669.

II. SECONDARY AND GENERAL SOURCES

Barthes, Roland. Critical Essays. Trans. by Richard Howard. Evanston: Northwestern University Press, 1972.

Bentley, Eric. The Playwright as Thinker. New York: Meridian Books, 1955.

Berkeley, George. "An Essay Towards a New Theory of Vision," Works on Vision. Edited by Colin M. Turbayne. New York: Bobbs-Merrill Co., Inc., 1963.

Berryman, John. "Her & It," in Love and Fame. 2nd edition. New York: Farrar, Strauss and Giroux, 1972.

Collingwood, R.G. The Principles of Art. London: Clarendon Press, 1938; London: Oxford University Press, 1958.

Copleston, F.C. Aquinas. Baltimore: Penguin, 1955.

Fish, Stanley E. Self-Consuming Artifacts. Berkeley: University of California Press, 1972.

Fuller, A.A.G. A History of Philosophy. Rev. ed. New York: Henry Holt and Co., 1947.

Gelwick, Richard Lee. "Michael Polanyi: Credere Aude: His Theory of Knowledge and Its Implications for Christian Theology." Ph.D. dissertation, Pacific School of Religion, 1965.

Grene, Marjorie. The Knower and the Known. Berkeley: University of California Press, 1966; Campus Books, 1974.

Harrington, John B. "Augustine's Epistemology." Unpublished paper presented to Pacific Coast Theological Group, April 11-12, 1958, Pacific School of Religion.

XUM

Heidegger, Martin. Being and Time. Trans. by John Macquarrie and Edward Robinson. New York: Harper & Brothers, 1962.

Hirsch, E.D., Jr. "Three Dimensions of Hermeneutics." New Literary History (Spring, 1972), 245-61.

Julesm, Bella. "Binocular Depth Without Familiarity," Contemporary Theory and Research in Visual Perception. Edited by Ralph N. Harber. New York: Holt, Rinehard and Winston, 1968.

Kant, Immanuel. Critique of Pure Reason. Trans. by Norman Kemp Smith. New York: Humanities Press, 1929.

Kuhn, Thomas. The Structure of Scientific Revolutions. Chicago: University of Chicago Press; Phoenix Books, 1962.

Langford, Thomas A. and Poteat, William H. (eds.). Intellect and Hope: Essays in the Thought of Michael Polanyi. Durham, North Carolina: Duke University Press, 1968.

Long, David Wesley. "Michael Polanyi's Theory of Knowledge." Ph.D. dissertation, Florida State University, 1967.

Mead, George Herbert. "Evolution Becomes a General Idea," On Social Psychology. Edited by Anselm Strauss. Chicago: University of Chicago Press; Phoenix Books, 1964.

Merleau-Ponty, M. Phenomenology of Perception. Trans. by Colin Smith. London: Routledge & Kegan Paul, 1962.

Peirce, Charles S. "The Fixation of Belief," Philosophical Writings of Peirce. Edited by Justus Buchler. New York: Dover, 1955.

Prosch, Harry. "Polanyi's Tacit Knowing in the Classic Philosophers," British Society for Phenomenology Journal 4(1973), 201-16.

Plato. Meno.

Prust, Richard Charles. "The Knowledge and Reality of God: The Theological Implications of Michael Polanyi's Epistemology and Ontology." Ph.D. dissertation, Duke University, 1970.

XUM

Przywara, Erich (ed.). An Augustine Synthesis. New York: Harper & Brothers; Harper Torchbook, 1958.

Smith, Gerald L. "Tacit Knowing and the Logic of Tradition: A Study in the Thought of Michael Polanyi." Ph.D. dissertation, Duke University, 1969.

Stevens, Wallace. "The Emperor of Ice Cream," in The Palm at the End of the Mind. Edited by Holly Stevens. New York: Rnadom House, 1969; Vintage Books, 1972.

________. "The Snow Man," in The Palm at the End of the Mind. Edited by Holly Stevens. New York: Random House, 1969; Vintage Books, 1972.

Stumpf, Samuel Enoch. Socrates to Sartre. New York: McGraw-Hill Book Company, 1966.